#### PROJECT REPORT

ON

SpurStartUp

FOR

Synerzip Softech India Pvt. Ltd.

BY

Shreyas Nargund

SAVITRIBAI PHULE PUNE UNIVERSITY
MASTER IN COMPUTER APPLICATION
MAHARASHTRA EDUCATION SOCIETY'S
INSTITUTE OF MANAGEMENT AND CAREER COURSES
(IMCC), PUNE-411038
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Maharashtra Education Society's



### INSTITUTE OF MANAGEMENT AND CAREER COURSES (IMCC)

(Recognized by Savitribai Phule Pune University & Approved by AICTE)

131, Mayur Colony, Kothrud, Pune 411 038 Telefax : +91-20-25466271, 25463453 • E-mail: directorimcc@ vsnl.net

V. H. INAMDAR Director +91-20-25445067 (Director) Telefax; +91-20-25466271, 25463453 (Registrar) +91-20-25440196 (TPO) Web Site: <a href="https://www.mesimcc.org">www.mesimcc.org</a>>

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## **CERTIFICATE**

is is to certify that the Project Report entitled "SpurStartUp" is prepared by Shreyas ngund a student of M.C.A. Course for the Academic Year 2016-17 at M.E.Society's Institute Management & Career Courses (IMCC), Punc - 411038. M.C.A Course is affiliated to witmibai Phule Pune University.

the best of our knowledge, this is original study done by the said student and important urces used by him/her have been duly acknowledged in this report.

ne report is submitted in partial fulfillment of M.C.A Course for the Academic Year 2016-17 per the rules & prescribed guidelines of Savitribai Phule Pune University.

r. Santosh Deshpande OD, Computer Dept. IMCC Dr. Vikas Inamdar Director, IMCC

xternal Examiner

Internal Examiner

liey Suite 308 14 00 490



Date: March 24, 2017

#### To Whomsoever It May Concern

This is to certify that Mr. Shreyas Nargund, MCA Final Year student from IMCC, Pune has successfully completed project work in our company on the "SpurStartUp" using PHP, AngularJS, Javascript, jQuery and Bootstrap under the guidance of Mr. Vitthal Kudal (Project Manager, Synerzip).

As a part of Non-Disclosure Agreement between an employee and the company, no individual is allowed to represent and share the source code, executables and any confidential information regarding project beyond organization premises.

For Synerzip Softech India Pvt. Ltd.

Nidhi Shrikhande

M

Sr. HR Manager

## **CERTIFICATE**

This is to certify that Shreyas Nargund has completed the project work entitled "SpurStartUp" under my guidance. The report is submitted in partial fulfillment of M.C.A. Course for the Academic Year 2016-2017 as per the rules & prescribed guidelines of Savitribai Phule Pune University.

His/Her work is found to be satisfactory and complete in all respects.

Manasi Shirurkar (Internal Project Guide)

#### Acknowledgment

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Shreyas U. Nargund

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## **CHAPTER 1**

## **INTRODUCTION**

## 1.1 Company Profile

#### **Synerzip Softech India Private Limited**

Synerzip is a service based company that offers in-depth expertise in Agile software product development to venture funded small/mid-sized software companies focused on social media, mobile, big data analytics, cloud and enterprise software.

Synerzip helps client to scale their engineering capacity and accelerate their roadmap, and become their long-term partner and trusted advisor. Synerzip is about Agile Software Product Development. Synerzip is headquartered in the United States. The US-based architects and product managers work on-site with clients domestically and work directly with the company's software development team in Pune, India. Synerzip works as a co-development partner for venture-backed software companies in their growth phase. Following Agile practices, Synerzip seamlessly dovetails with each client's engineering team, helping them scale up in a flexible, capital-efficient and frictionless manner. For each client, Synerzip creates a software team that is

tailored for them – with required skill mix, including mobile, cloud, big-data analytics and enterprise software.

Synerzip was founded in 2004 and is headquartered in Dallas.

The company has presence in Texas and the San Francisco Bay

Area as well as a development center in Pune, India.

Synerzip has served more than 100 clients.

Synerzip Named to Top 100 Tech Companies Founded and Managed by Indians in the U.S. by SiliconIndia.

Synerzip is a trusted outsourcing partner for Agile software product development. Synerzip helps clients accelerate the delivery of the product roadmap and fills technology skill gaps. We save customers at least 50% with our offshore software development and have U.S.-based local architects and product managers located on-site.

Synerzip has served more than 100 clients. Clients include companies backed by leading investors, such as Tangoe (Sevin Rosen, now public), Credant (Austin Ventures, now acquired by

Dell), PeopleAdmin (Vista Equity), Quickoffice (Mayfield, now acquired by Google), iTKO (Covera Ventures, now acquired by CA), ExamSoft (Spectrum Equity), Studer Group (JMI Equity, now acquired by Huron Consulting), Clockwork Solutions (Teakwood Capital), CloudOn (Rembrandt Venture, Translink Capital and Foundation Capital, acquired by Dropbox), Kinnser (Insight Venture Partners), DrillingInfo (Insight Venture Partners), and SnapLogic (Andreessen Horowitz).

### 1.2 Existing System and Need for System

Proposed system is an assembly of interrelated sub-systems which are a crowdfunding portal, a learning management system henceforth referred as LMS and a business forum.

Crowdfunding is the practice of funding a project or a venture by raising money from a large number of people who each contribute a relatively small amount, typically via the Internet.

Crowdfunding is a way of raising finance by asking a large number of people each for a small amount of money. Until recently, financing a business, project or venture involved asking a few people for large sums of money. Crowdfunding switches this idea around, using the internet to talk to thousands – if not millions – of potential funders. Typically, those seeking funds will set up a profile of their project on a website. They can then use social media, alongside traditional networks of friends, family and work aquaintances, to raise money. There are three different types of crowdfunding: donation, debt and equity.

#### **Donation / Reward crowdfunding**

People invest simply because they believe in the cause. Rewards can be offered (often called reward crowdfunding), such as acknowledgements on an album cover, tickets to an event, regular news updates, free gifts and so on. Returns are considered intangible. Donors have a social or personal motivation for putting their money in and expect nothing back, except perhaps to feel good about helping the project.

#### **Debt crowdfunding**

Investors receive their money back with interest. Also called peer-to-peer (p2p) lending, it allows for the lending of money while bypassing traditional banks. Returns are financial, but investors also have the benefit of having contributed to the success of an idea they believe in. In the case of microfinance, where very small sums of money are leant to the very poor, most often in developing countries, no interest is paid on the loan and the lender is rewarded by doing social good.

#### **Equity crowdfunding**

People invest in an opportunity in exchange for equity. Money is exchanged for a shares, or a small stake in the business, project or venture. As with other types of shares, apart from community shares, if it is successful the value goes up. If not, the value goes down.

Proposed system also comprises of a Learning Management System. A **learning management system** (**LMS**) is a software application for the administration, documentation, tracking, reporting and delivery of electronic educational technology (also called e-**learning**) courses or training programs.

The key to understanding the difference between LMS and other computer education terms is to understand the systemic nature of LMS. LMS is the framework that handles all aspects of the learning process. An LMS is the infrastructure that delivers and manages instructional content, identifies and assesses individual and organizational learning or training goals, tracks the progress towards meeting those goals, and collects and presents data for supervising the learning process of the organization as a whole. A

learning management system delivers content but also handles registering for courses, course administration, skills gap analysis, tracking, and reporting.

LMS enables users to engage in various courses of their choice via internet. User can enroll for a course and learn the content of the course with actually being physically present at the location. LMS allows users to have one to one interaction with the course instructors / mentors.

Another component of the proposed system is a Business forum.It is a platform where users can come togather and socialize / interact wtih other users of the system.It is a very useful platform which enables users of the system to share their views,ideas,opinions,concerns regarding diffrent matters of business management domain. It also helps users to advertise their campaigns, gain social contacts or connections which could potentially in getting help them fundind campangns. Authors on the business forum can share number of articles related to business management world which would help users to stay up to date with business management domain.

## 1.3 Scope of the System

The proposed system is divied into 3 components - a crowdfunding portal, a LMS portal and a business community forum which allows users to interact and socialize with the community.

#### 1) Crowndfunding Portal:-

Crowdfunding portal aims to facilitate users with functionality that will allow users to showcase their ideas with a concrete business plan.

Crowdfunding will have mainly two types of users – admins and the subscribers.

Crowdfunding System's Scope is as follows:

#### • Admin User :-

 Reports – Various reports that puts emphasis on the various statistics and the behavioural patterns of the user and other components of the system.

- Manage Users As an admin user will be able to perform create, update delete user accounts.
- Manage Campaigns As an admin user
   will be able to create, update, delete
   campaigns created by the other
   subscribers.
- Review Campaings Admin should be
   able to review and then approve / deny /
   suggest modifications to the campaigns
   created by the subscribers
- Manage Portal Settings Admin can mange portal settings such as the SpurStartUp's fee in the crowdfunding donations, default email address for the website's contact address
- Export Reports to CSV file Reports shown in the admin dashboard can be exported to the CSV file.

- Campaign Category Management –
   Admin can create , update , delete campaign categories.
- Monitor Donation Transactions Admin can view all the donations made to a specific campaign to avoid any mishapps.
- Google Analytics (View how many users have visited website and what page particularly) Admin needs to set the google analytics api key and the account key to record the google analytics data.
- Mailchimp integration for automated mail kickback mails – It's a third party application used to send bulk emails to the users of the system, as an admin user can configure the settings through the admin dashboard.

#### • Subscriber User :-

- Edit Profile User can edit his own profile.
- Start Campaign User start create a campaign which will be approved by admin.
- Edit Campaign User can edit his own campaign, once edited campaign will be resubmitted for approval to the admin.
- Preview Campaing before submitting for review – A WYSIWYG view for the users to get an idea of what their campaing will look like once approved.
- View Campaigns Users can view campaigns submitted by other user along with the various filters of following categories
  - Name of campaign
  - Name of campaign owner
  - Geographical location

- Category
- Date
- Send IM / View IM View Inbox Users can send Instant Messages to the
   other users of the system which are
   stored in their respective inboxes.
- Donate User can donate an amount of their choice to the campaigns submitted by other users.
- Manage Payment Settings User can add edit delete save list of credit / debit cards to their accounts to make donation process smoother.
- My Contributions User can view and can track the status of all the donation they have done so far.
- Google Analytics Configure google analytics account settings that will allow users to view how many users have visited their campaign.

### 2) Learning Managemnet system (LMS):-

Learning mangement system aim to ficilitate users with the functionality that will allow users to gain more knowledge through the means of online courses mentor sessions and formal as well as informal assessments.LMS has three types of users namely admins , mentors/instructors , students/users/subscribers.Scope of LMS according to functionality of the individual user type is as follows:

#### • Admin

- Create Course Create Update
   Delete Courses for students
- Assign instructor / mentor –
   Assign one or more mentors to a course.
- o Decide course fee
- Send Invites Send invites to users of the system for a particular

course.Also share the course information on social media.

- Mentor
  - Create / Upload / Edit CourseContent
- User / Student
  - Search Courses –byname,category,mentor
  - View Courses
  - Enroll Course

#### 3) Business Forum:-

Its a platform for all the users of the SpurStartUp where they can interact with each other in a social manner and share their views with other users.

- 1) Blog Post CRUD
- 2) Activity Feed
  - a. Personal Activity
  - b. Friends Activity
  - c. Group Activity

- d. Sitewide Activity
- e. Like Bookmark Share Comment Functionality
- 3) Polls
  - a. Multiple Choice
  - b. Percentage
  - c. Hot n Cold
- 4) Question
  - a. User questions
  - b. Mentor questions
- 5) Mentor Sessions
  - a. Questions
  - b. Discussions threads
  - c. Article sharing
- 6) Groups
  - a. Group CRUD ( Admin Only )
  - b. Invites ( Depends on group setting )
  - c. Group Project
    - i. Create Project
      - 1. Decide Goals
      - 2. Assume roles and responsibilities

# SpurStartUp

- 3. Breakdown Tasks
- 4. Asssign Tasks
- ii. Task Followup
- iii. Monitor Project Progress
- 7) Drive
  - a. Upload / Create / Edit / Download Documents
  - b. Share with friends, groups, projects, sitewide

## 1.4 **Operating Environment**

#### Minimum Hardware Requirements

- Processor Intel x86 Architecture 3GHz processor or equivalent
- RAM 2 GB RAM
- Hard Disk 40GB

#### **Software Requirements**

- Operating System Windows XP, Windows 7, Windows Server 2003, Windows Server 2008, Linux
- distributions such as Ubuntu, Fedora, Redhat.
- Apache Version Apache 2.2
- MySQL Version 5.1.36
- PHP Version 5.6.5, Ubuntu 16.4
- AngularJs Version 1.0
- Bootstrap Framework
- Browser Firefox, Google Chrome, Safari
- Wordpress 4.7.0 or higher

# SpurStartUp

\*Note: JavaScript should be enabled in all the browsers

Web Server Packages -LAMP stack with XAMP/WAMP

\*Note: If PHP, MySQL & Apache are manually configured, web server packages are not required.

### 1.5 Detail Description of Technology Used

#### • Php

PHP is a <u>server-side scripting</u> language designed primarily for <u>web development</u> but also used as a <u>general-purpose</u> <u>programming language</u>. PHP originally stood for Personal Home Page, but it now stands for the <u>recursive</u> <u>acronym</u> PHP: Hypertext Preprocessor.

PHP code may be embedded into HTML or HTML5 code, or it can be used in combination with various web template systems, web content management systems and web frameworks. PHP code is usually processed by a PHP interpreter implemented as a module in the web server or as a Common Gateway Interface (CGI) executable. The web server combines the results of the interpreted and executed PHP code, which may be any type of data, including images, with the generated web page. PHP code may also be executed with a command-line interface (CLI) and can be used to implement standalone graphical applications.

The standard PHP interpreter, powered by the Zend Engine, is free software released under the PHP License.

PHP has been widely ported and can be deployed on most web servers on almost every operating system and platform, free of charge.

#### Adavantages of using PHP:

- Open source: It is developed and maintained by a large group of PHP developers, this will helps in creating a support community, abundant extension library.
- Speed: It is relative fast since it uses much system resource.
- Powerful library support: You can easily find functional modules you need such as PDF, Graph etc.
- Built-in database connection modules: You can connect to database easily using PHP, since many websites are data/content driven, so we will use database frequently, this will largely reduce the development time of web apps.

#### • AngularJS

AngularJS JavaScript-based open-source frontis a end web application framework mainly maintained by Google and by a community of individuals and corporations to address many of the challenges encountered in developing single-page applications. It aims to simplify both the development and the testing of such applications by providing a framework for clientside model-view-controller (MVC) and model-viewviewmodel (MVVM) architectures, along with components commonly used in rich Internet applications. The AngularJS framework works by first reading the HTML page, which has embedded into it additional custom tag attributes. Angular interprets those attributes as directives to bind input or output parts of the page to a model that is represented by standard <u>JavaScript</u> <u>variables</u>. The values of those JavaScript variables can be manually set within the code, or retrieved from static or dynamic **JSON** resources.

#### Adavantages of AngularJS

- It provides structure to JavaScriptUsing jQuery .
- jQuery does have some templating, but each JavaScript library has that built into it by nature.
- Two-way data-binding
   While you can write a simple two-way data-binding event in jQuery, JavaScript
   MVC libraries provide a more declarative (using HTML) way of connecting models to your view.
- Great for SPA (Single-Page Applications)

#### • HTML 5

HTML5 is a <u>markup language</u> used for structuring and presenting content on the <u>World Wide Web</u>. It is the fifth and current version of the HTML standard.

It was published in October 2014 by the World Wide Web Consortium (W3C) to improve the language with support for the latest multimedia, while keeping it both easily readable by humans and consistently understood by computers and devices such as web browsers, parsers, etc. HTML5 is intended to subsume not only HTML4, but also XHTML 1 and DOM Level 2 HTML.

more interoperable implementations; it extends, improves and rationalizes the markup available for documents, and introduces markup and application programming interfaces (APIs) for complex web applications. For the same reasons, HTML5 is also a candidate for crossplatform mobile applications, because it includes features designed with low-powered devices in mind.

Many new <u>syntactic</u> features are included. To natively include and handle <u>multimedia</u> and <u>graphical</u> content, the new <u><video></u>, <u><audio></u> and <u><canvas></u> <u>elements</u> were added, and support for scalable vector graphics (<u>SVG</u>)

content and MathML for mathematical formulas. To enrich the semantic content of documents, new page elements structure such as <main>, <section>, <article>, <header>, <footer>, <aside>, <nav> and <figure>, are added. New attributes are introduced, some elements and attributes have been removed, and others such as <a>, <cite> and <menu> have been changed, redefined or standardized.

The APIs and <u>Document Object Model</u> (DOM) are now fundamental parts of the HTML5 specification and HTML5 also better defines the processing for any invalid documents.

#### Javascript

JavaScript is a <u>high-level</u>, <u>dynamic</u>, <u>untyped</u>, and <u>interpreted programming language</u>. It has been standardized in the <u>ECMAScript</u> language specification.

Alongside HTML and CSS, JavaScript is one of the three core technologies of World Wide Web content production; the majority of websites employ it, and all modern Web browsers support it without the need for plugins. JavaScript is <u>prototype-based</u> with <u>first-class</u> a multi-paradigm language, functions, making it supporting object-oriented, imperative, and functional programming styles. It has an API for working with text, arrays, dates and regular expressions, but does not include any <u>I/O</u>, such as networking, storage, or graphics facilities, relying for these upon the host environment in which it is embedded.

Although there are strong outward similarities between JavaScript and Java, including language name, <u>syntax</u>, and respective <u>standard libraries</u>, the two are distinct languages and differ greatly in their design. JavaScript was influenced by programming languages such as <u>Self</u> and <u>Scheme</u>.

JavaScript is also used in environments that are not Webbased, such as PDF documents, site-specific browsers, and desktop widgets. Newer and faster JavaScript virtual machines (VMs) and platforms built upon them have also increased the popularity of JavaScript for server-side Web the client side, developers applications. On have traditionally implemented **JavaScript** an interpreted language, but more recent browsers perform just-in-time compilation. Programmers also use JavaScript in video-game development, in crafting desktop and mobile applications, and in server-side network programming with run-time environments such as Node.js.

#### Adavantages of Javascript

Javascript is executed on the client side This means that the code is executed on the user's processor instead of the web server thus saving bandwidth and strain on the web server.

- Javascript is a relatively easy language The Javascript language is relatively easy to learn and comprises of syntax that is close to English. It uses the DOM model that provides plenty of prewritten functionality to the various objects on pages making it a breeze to develop a script to solve a custom purpose.
- As the code is executed on the user's computer, results and processing is completed almost instantly depending on the task (tasks in javascript on web pages are usually simple so as to prevent being a memory hog) as it does not need to be processed in the site's web server and sent back to the user consuming local as well as server bandwidth.

Extended functionality to web pages Third party add-ons like Greasemonkey enable Javascript developers to write snippets of Javascript which can execute on desired web pages to extend its functionality. If you use a website and require a certain feature to be included, you can write it yourself and use an add-on like Greasemonkey to implement it on the web page.

## **CHAPTER 2**

## **PROPOSED SYSTEM**

### 2.1 Proposed System

The proposed system is the first application of its kind, it is a collaboration of three systems which compliment each other in such a way that their functionality complete each other.

The system will not only give the entrepreneurs the benefit of being able to raise funds for their business but also allow them to gain better insight of the number of knacks that are helpful in running a business.

It will enable the subscribers to have an access to the calculation in their own organization by keeping track of records, transactions and other activities of campaign.

Along with the campaign creation, the system allows the subscribers to add documents against the same. A pre-defined document structure will be maintained for each campaign.

The system will generate reports and analytics like that will help admins to get idea of the various statistics such as total funding saught in a specific time frame, most popular category for campaigns, ratio of successful campaigns to unsuccessful campaigns for a particular time frame.

Once the campaign is started by campaign owner, it is open for donations throughout the campaign duration. Campaign duration is a fixed duration of campaign for which the campaign is open for donations. Campaign owner sets the campaign goal and aims to achieve that goal within the respective campaign duration. If the goal is achieved the donation amount is credited to campaign owner's bank account, if not all the donation transactions are reverted back to the donors.

Thus, the whole process of system engages the users of an organization by involving them to maintain the campaign data which will eventually help them to know if their plan will result profitably or not.

### **2.2 Objectives of System**

SpurStartUp is a system with an aim of helping young student entrepreneurs in establishing their business by providing all the necessesary facilities to the enrepreneurs.

The basic need of an entrepreneur is capital to invest in his business idea. SpurStartUp thrives to provide this basic nessesity to the entrepreneurs by enabling them to showcase their business idea over a large number of potential donors via internet.

Crowdfunding feature of the SpurStartUp not only helps campaign owners to raise funds for their campaigns but also it allows them to advertise their campaign to huge amount of viewers over the internet which could help them in their startups in later stages.

Just raising funds for your business and establishing your business is not enough , it is even more important to successfully run that business in order to get returns on the capital invested

in business.Odds of running a successful businees becomes very low with little knowledge of business management.SpurStartUp's LMS portal offers variety of courses which helps entrepreneurs to get knowledge of running a bussiness.The main objective of SpurStartUp is to groom successful entrepreneurs instead of just helping students to start their own startup.

Business Forum of SpurStartUp is desinged with a goal of improving social skills of the entrepreneurs. Social skills are of very much importantance for business owners. This business forum allows entrepreneurs to interact with number of people from community which helps them in building good social skills which would help them in later stage. Another purpose of setting up such platform is that a large chunk of this forum's user base is of veteran entrepreneurs who can mentor the young entrepreneurs in number of ways. It also helps them to build important connections which are equally important in any business.

#### **2.3 User Requirements**

#### **Crowdfunding Portal:**

As a campaign owner subscriber should be able to create a campaign which includes information like campaign name, campaign title, campaign description, campaign featured image, videos, campaign duration, campaign goal etc. which will provide all the information about their campaign.

Campaign owner should be able to add predetermined rewards for donations made by the other subscribers.

Campaigns created by campaigns owners need to be reviewed by SpurStartUp admins first before they are published on website.

It should be mandatory for campaign owners to link atleast one of their credit / debit card to their account through the stripe connect gateway.

System should enable viewers to donate to a specific campaign if the campaign duration is not over.

All the donations made to campaign are not to be transfered to campaign owner directly, instead all the donations are to be held untill the campaign is over.

Once the campaign is over system will check if the total amount of donations is greater than or equal to campaign goal, if yes the donation amount is transferred to campaign owners bank account else all the donation transactions are reverted back to their donors.

Viewers should be able to view all the campaigns that are approved by SpurStartUp admins.

**LMS** 

As a student user should be able to create/view/edit/delete his own profile which will be visible to other subscribers of the system.

A student user should be able to view courses displayed on LMS portal along with its details and fee structure.

A student user should be able to enroll for a course of his choice from the list of available courses by paying the predetermined fees.

A student user should be able to view course material that is made available to students over the LMS portal.

#### **Business Forum**

A subscriber should be able to create, view, delete, edit, share, like, comment posts/questions/polls posted on activity stream.

A subscriber should be able to view available mentor sessions and chose to join any one of them.

A subscriber should be able to upgrade his account to premium account to access additional functionality.

A premium subscriber should be able to create/join a group created by admins.

A premium subscriber should be able to create/share project and create tasks in that project.

A premium subscriber should be able to create a drive linked to his account where he can upload / share / create documents and files.

An admin should be able to view pending posts which are waiting for approval before they are visible to public.

An admin should be able to craete a group and invite premium subscribers to the group.

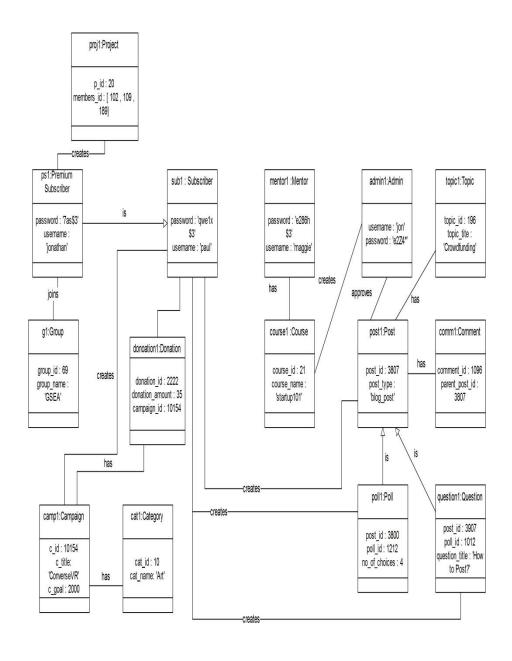
An admin should be able to create mentor sesions and assign a mentor to the mentor session.

A mentor should be able to view the mentor sessions and post in his mentor session.

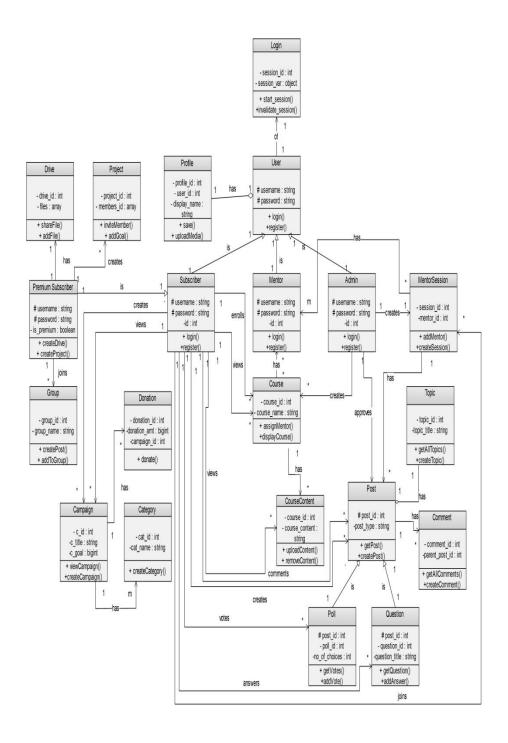
## **CHAPTER 3**

**ANALYSIS & DESIGN** 

### 3.1 Object Diagram

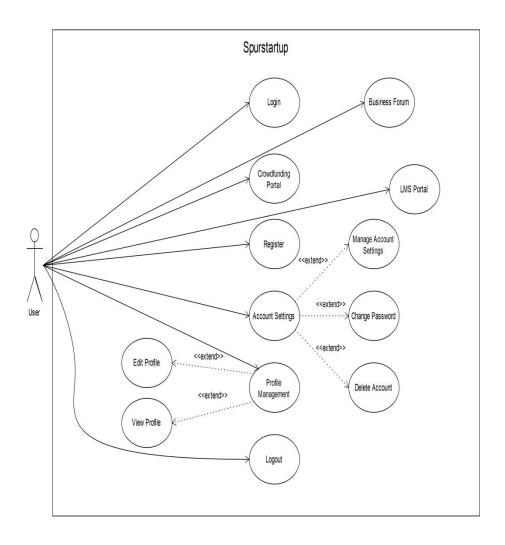


### 3.2 Class Diagram

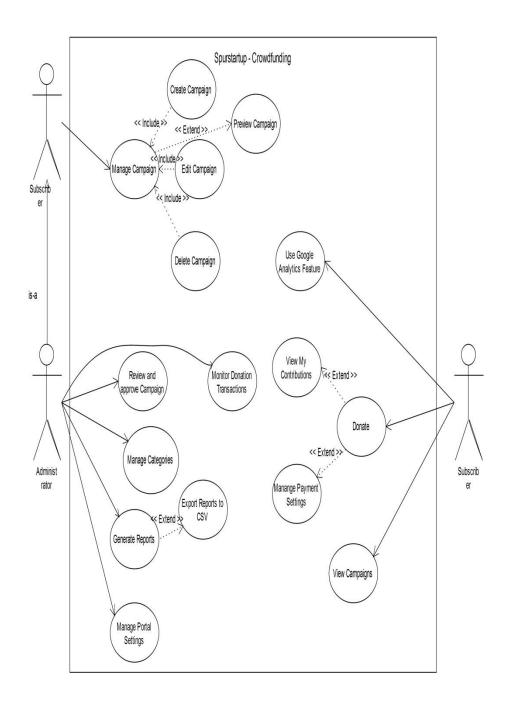


## 3.3 Use case

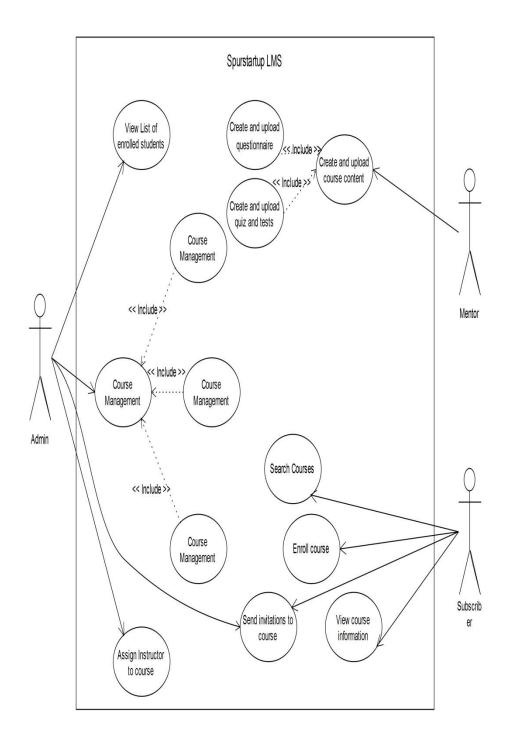
## 1) Business usecase



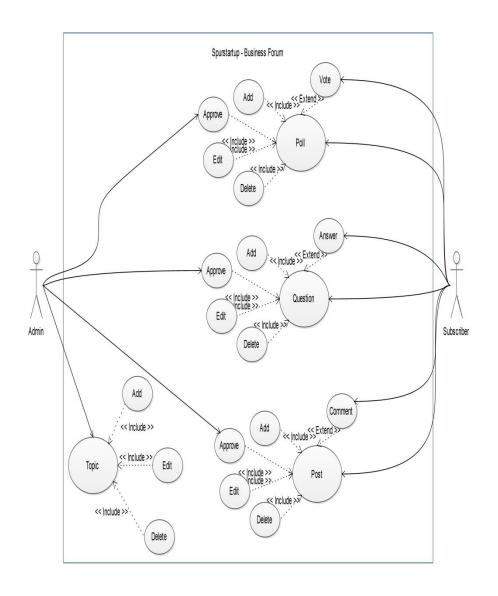
# 2) Crowdfunding usecase



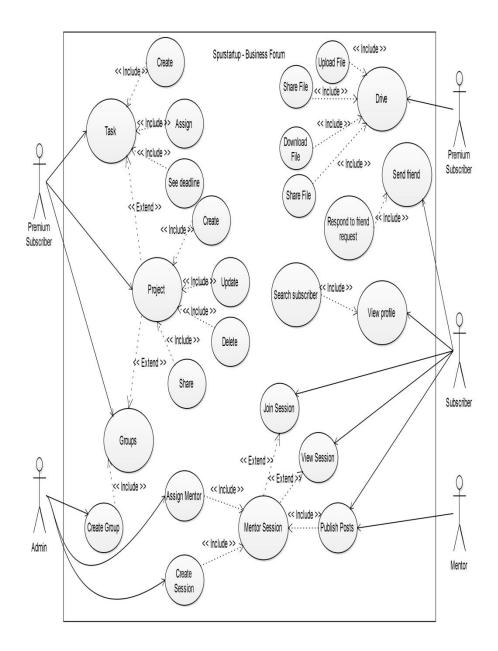
## 2) LMS usecase



## 3)Business Forum usecase 1

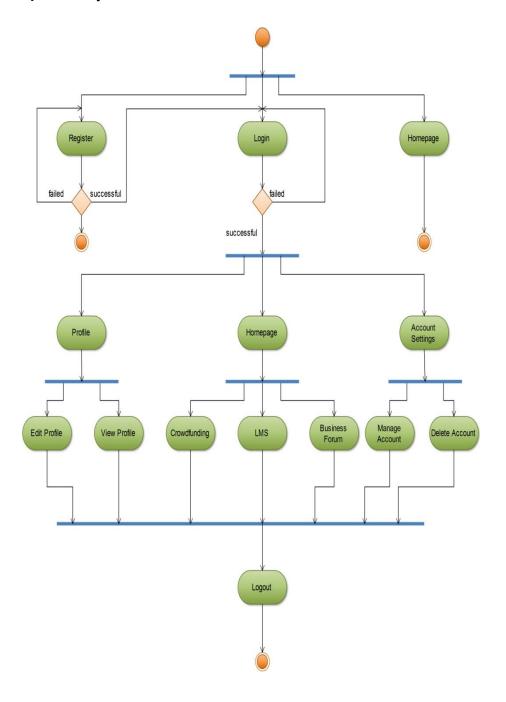


# 2)Business Forum usecase 2

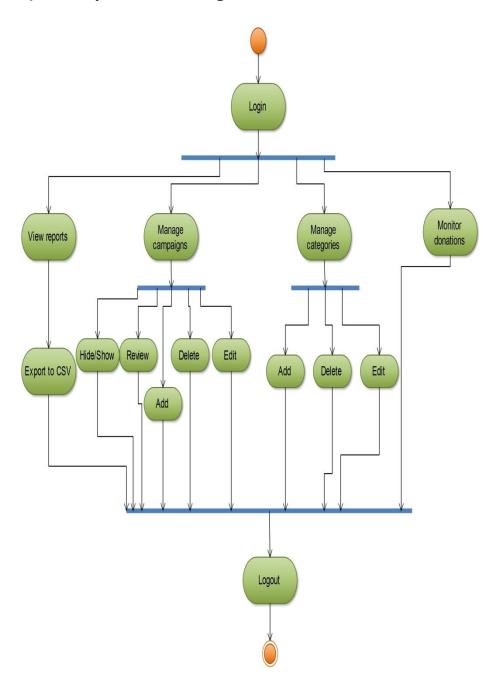


## 3.4 Activity Diagram

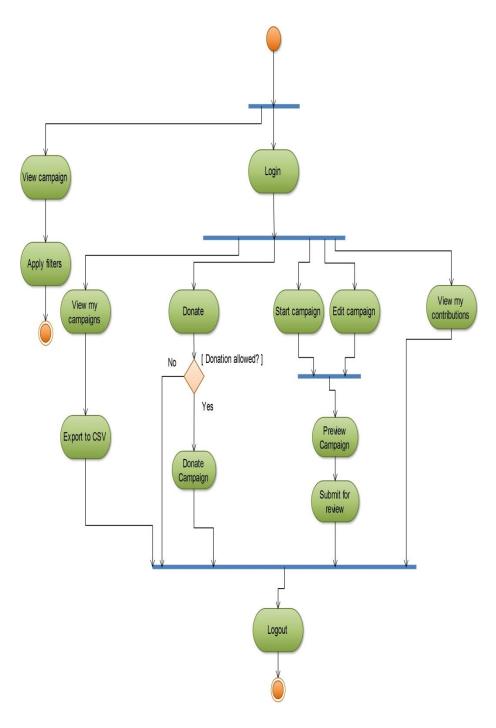
## 1) Activity Common



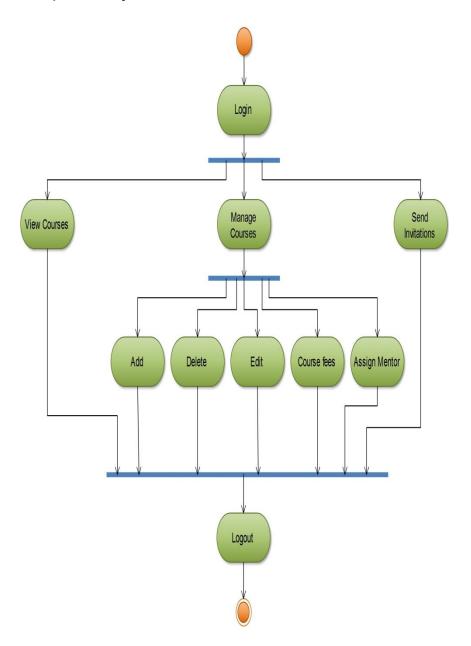
# 2) Activity Crowdfunding Admin



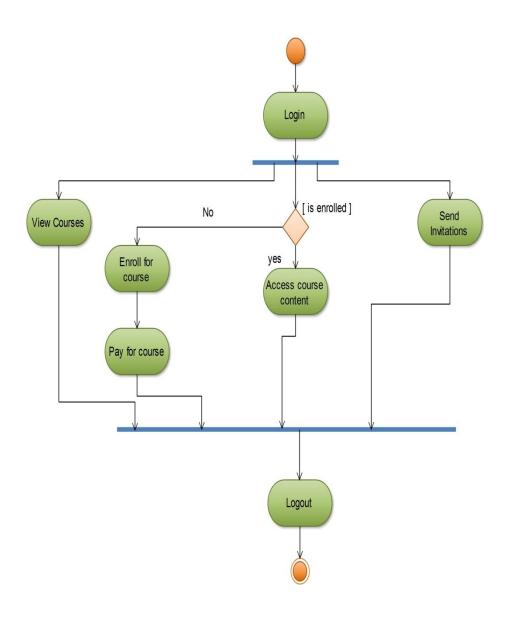
# 3) Activity Crowdfunding Subscriber



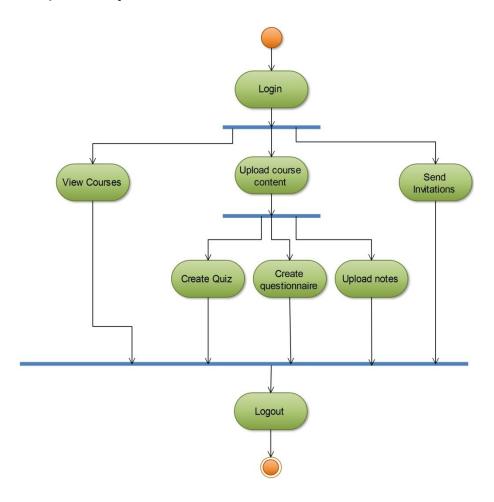
# 4) Activity LMS Admin



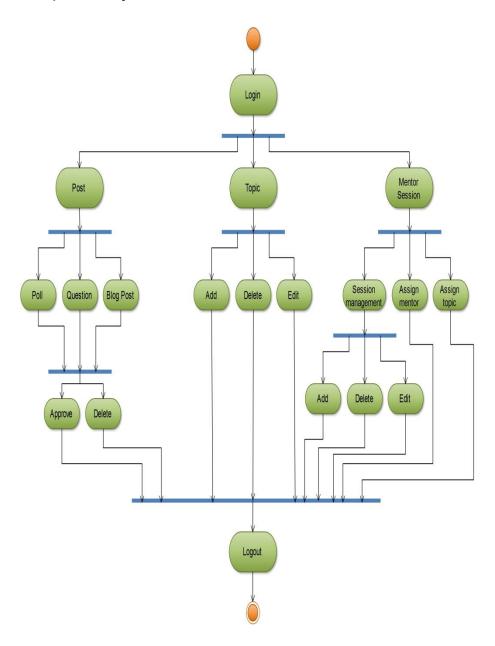
# 5) Activity LMS Subscriber



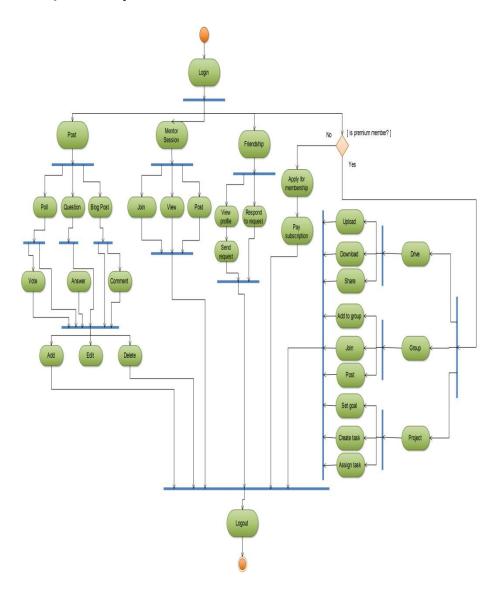
# 6) Activity LMS Mentor



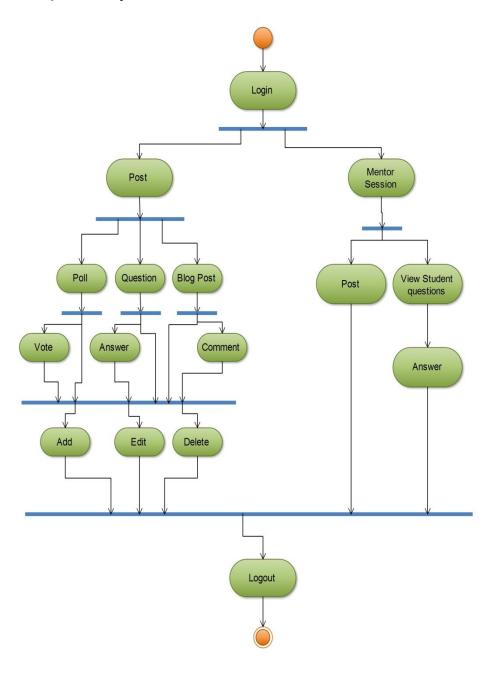
# 7) Activity Business Forum Admin



# 8) Activity Business Forum Subscriber

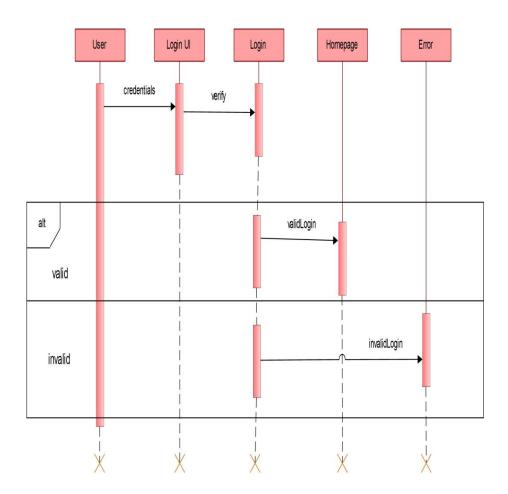


# 9) Activity Business Forum Mentor

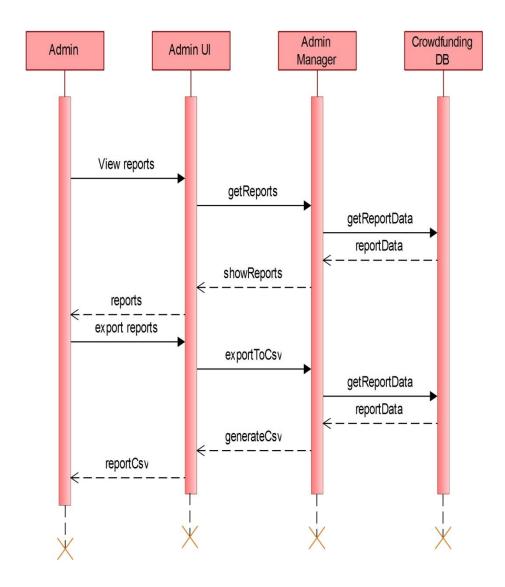


## 3.5 Sequence Diagram

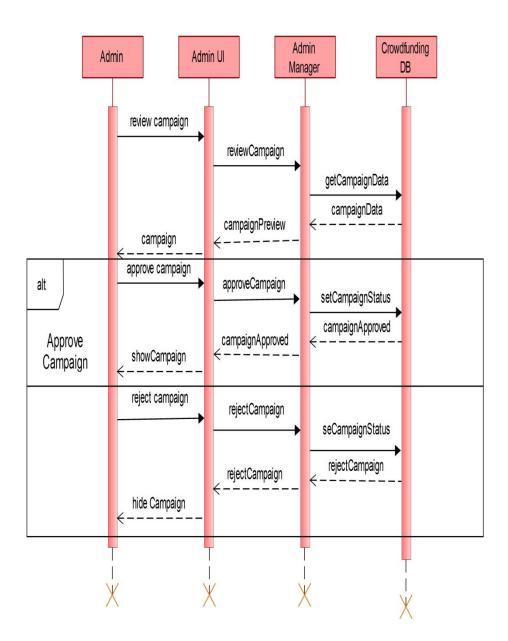
## 1) Sequence Login



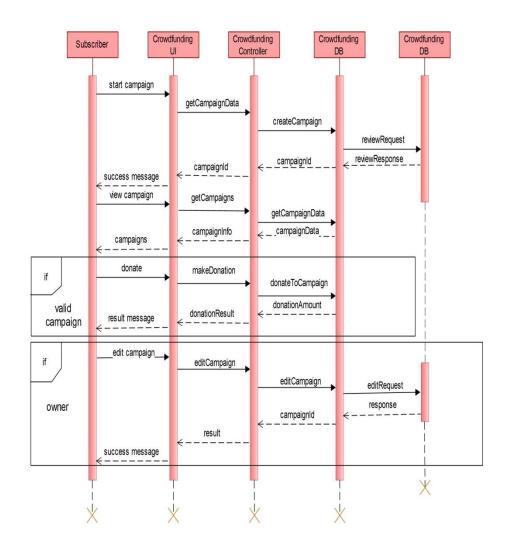
# 2) Sequence Crowdfunding Admin 1



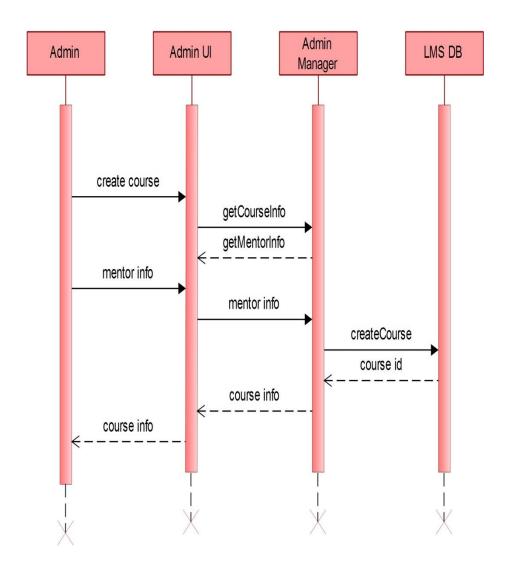
## 3) Sequence Crowdfunding Admin 2



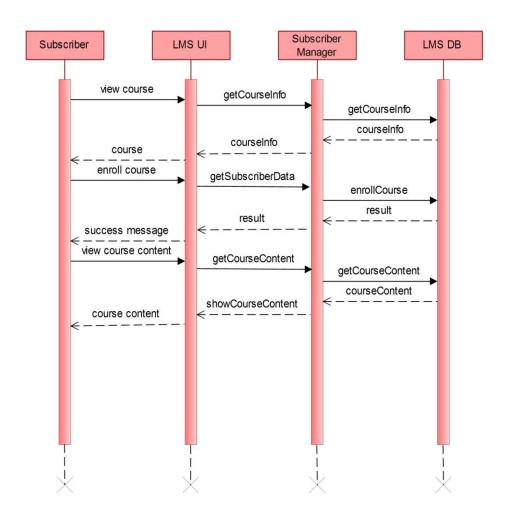
# 4) Sequence Crowdfunding Subscriber



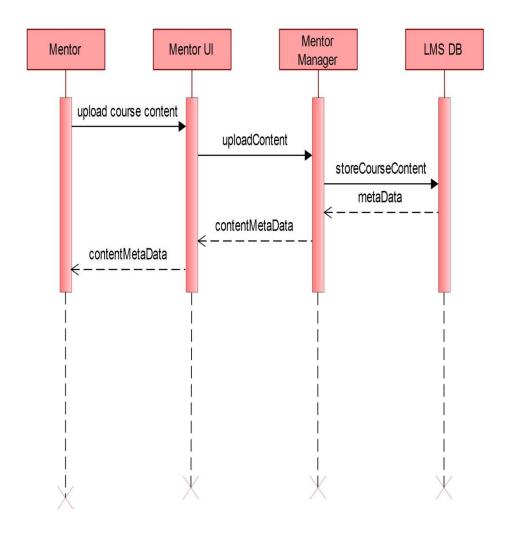
# 5) Sequence LMS Admin



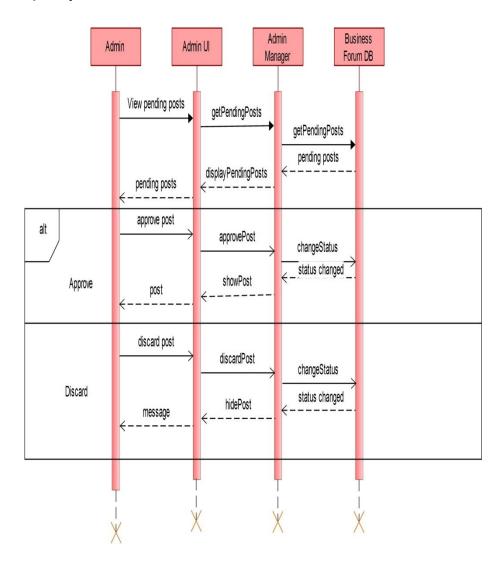
## 6) Sequence LMS Subscriber



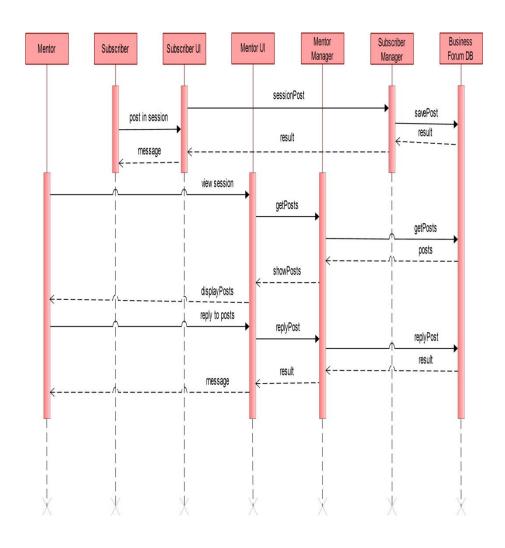
# 7) Sequence LMS Mentor



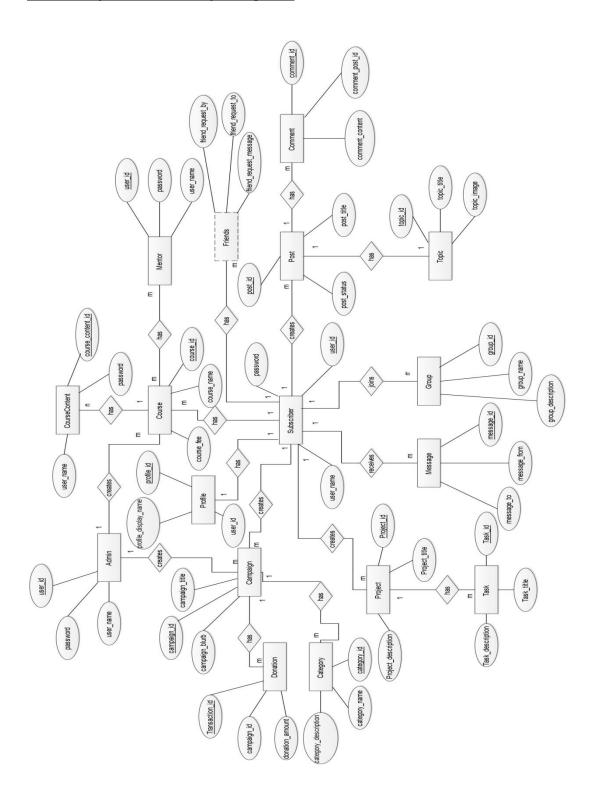
# 8) Sequence Business Forum Admin



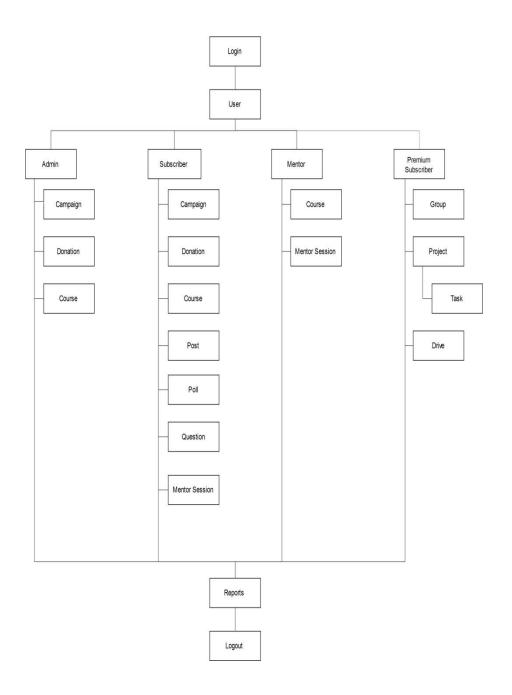
## 9) Sequence Business Forum Mentor



## 3.6 Entity-Relationship Diagram

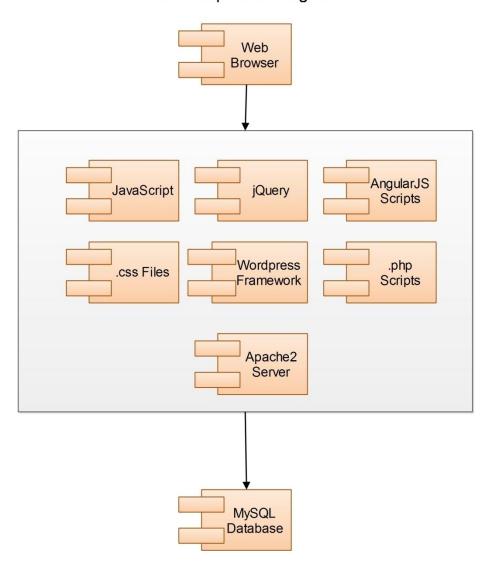


## 3.7 Module Hierarchy



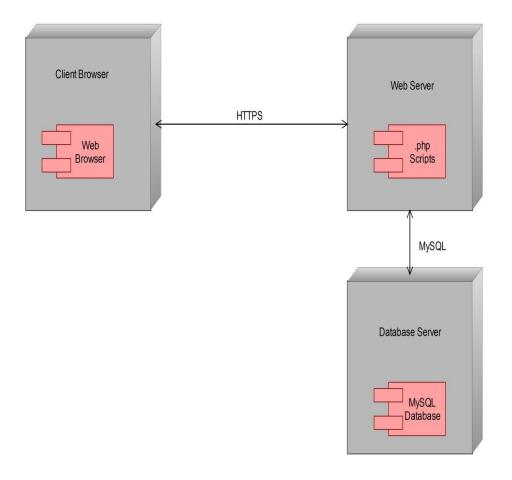
#### 3.8 Component Diagram

#### 3.8 Component Diagram



# 3.9 Deployment Diagram

3.9 Deployment Diagram



#### **3.10 Module Specification**

#### **Crowdfunding:**

#### Admin:-

Role of Admins in crowdfunding module is to monitor and review campaign before display.

Admin can edit campaigns created by other users.

Admin can create a category which is assigned to the campaign.

Admin can edit the category.

Admin can view all the donation transactions of a campaign.

Admin can view number of reports which are accesible through admin dashboard.

Admin can edit website settings.

#### Campaign:

Campaign can be created by subscribers.

Campaigns are approved by admins before starting.

A campaign is in active and running state utill the campaign duration period expires.

Other subscribers can view the campaign which are in active and running state.

Subscribers can chose to donate an amount of their choice to a particular campaign.

Amount raised by a campaign is transfered to its owner if the campaign goal is achieved within campaign duration.

Campaign owner can choose to link his google account with camaign to check how many visitors have viewed his campaign within specific duration.

Campaign owner can preview his campaign before submitting the campaign for approval.

#### **Subscriber:**

Subscriber has profile linked with his account. Subscriber can edit his profile by adding information about himself such as profile picture, his education information, his professional experiences and other information.

Subscriber can view his Inbox which consists of sent messages and received messages.

Subscriber can view a consolidated information about the donations he has made so far to various campaigns.

Subscriber can add / save his credit / debit card information to his account for donation purpose.

#### **Business Forum:-**

#### **Activity Stream:**

Subscriber can create posts which are displayed on activity stream.

Posts are of following types:-

- Blog Post: A blog article containing textual as well as other information such as images, videos etc.
- Poll: A post which has a title and number of choices. Subscribers can vote for one of the choices of a poll.
- Question: A post which has a question. Subscribers can answer to the questions asked by other subscribers.

 Update: A textual post which is broadcasted all over the site like facebook.

Subscriber can assign a topic to the post while creating a post.

Subscriber can share the posts to other social sites such as facebook, google+ , twitter, pinterest.

Subscriber can like, bookmark the post which can be viewed later.

Subscribers can comment on posts posted on activity stream.

#### Friendship:

Subscribers can search for another subscriber of the system.

Subscriber can send a friendship request.

Subscriber can either accept or ignore the incoming friendship request.

#### Group:

Admin can create a group.

Premium subscriber can join a group.

Premium subscriber can invite other premium subscribers to the group.

Group members can post posts in the group.

Group can share a project.

#### Project:

Premium subscriber can create a project which can be shared among other premium subscribers.

A goal can be set to a project by project creator.

A project can be divided into number of smaller tasks.

Each task can be assigned to an individual or group of project members.

#### LMS:-

#### **Course Management:**

Admin can create a course. Admin has to fill the course creation form in order to create a course.

Admin can assing one or more mentors for a course.

Admin can send invitation to other users of the system.

Admin can edit a course.

Admin can delete a course.

#### **Course Enrollment:**

Subscriber can view a course.

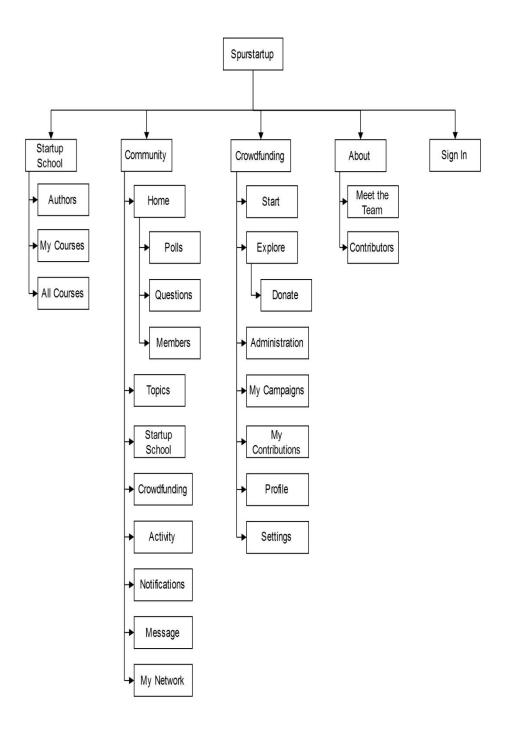
Subscriber can enroll for a course.

#### Course:

Mentor can upload the course content. Subscriber who

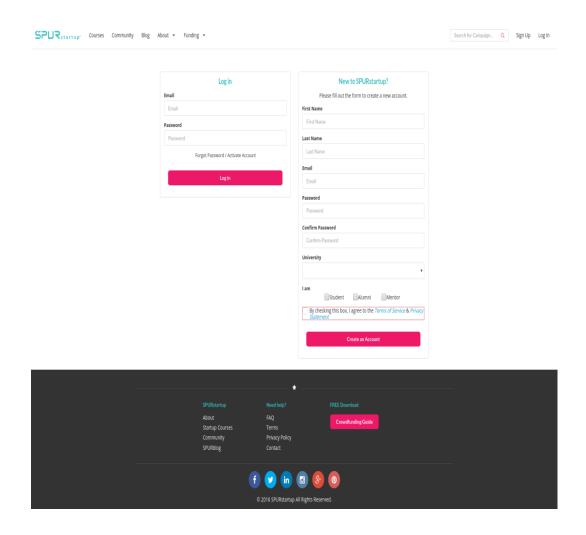
has enrolled for a course can view the course content.

#### 3.11 Website Map

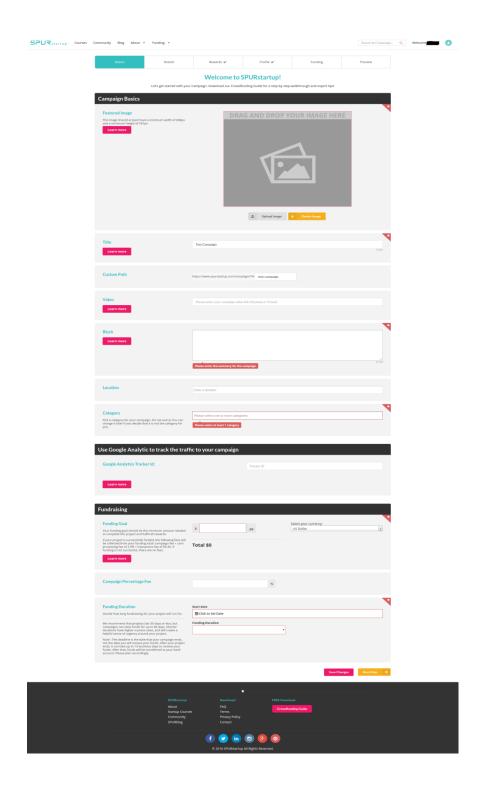


#### 3.12 User Interface Design

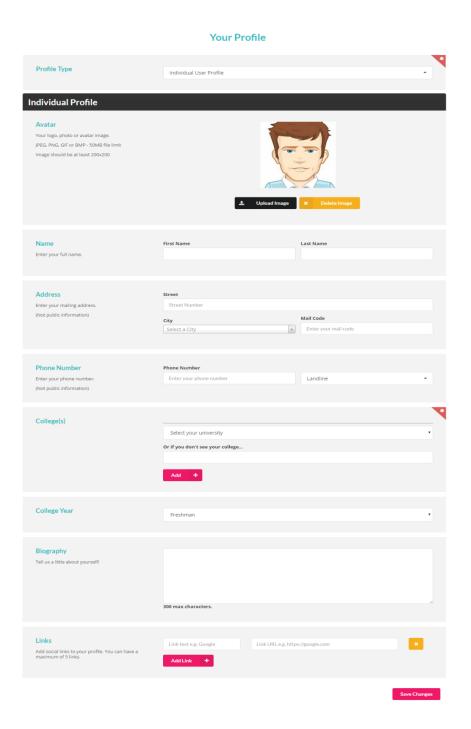
## 1) Login Screen



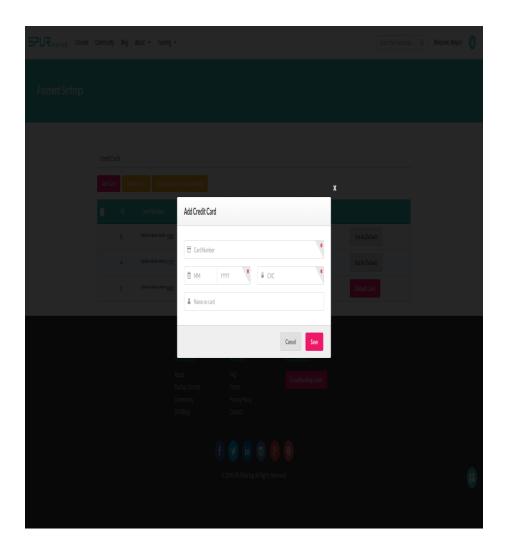
# 2) Create Campaign Screen



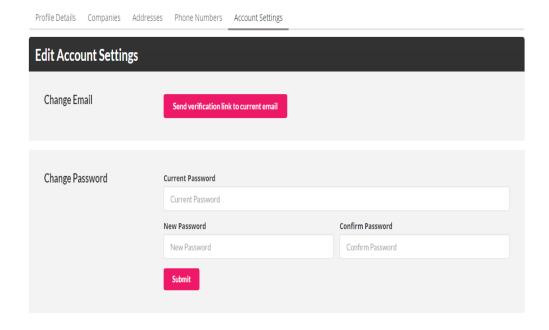
## 3) Edit Profile Screen



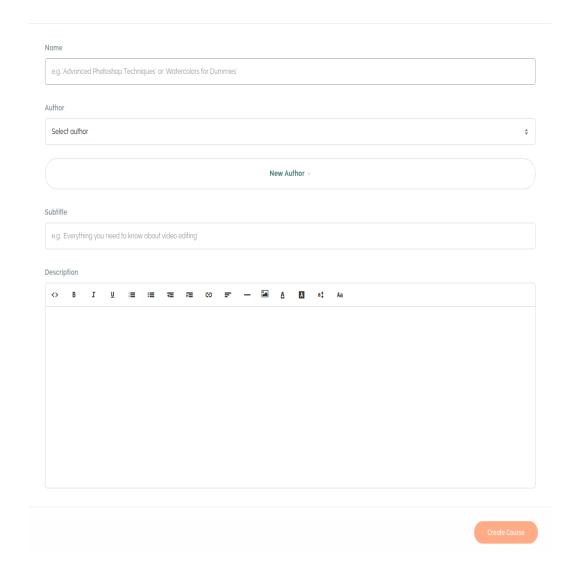
# 4) Add Card Screen



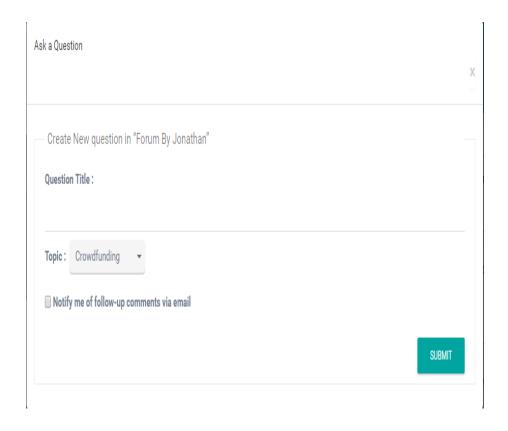
## 5) Change Password Screen



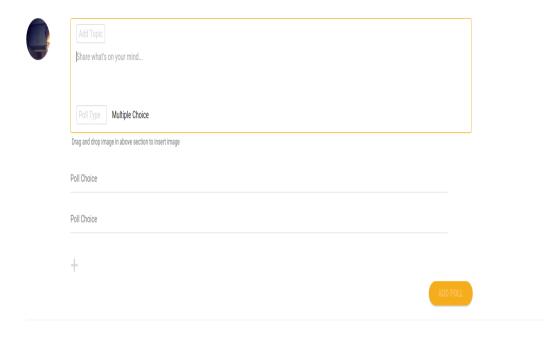
# 6) Create Course Screen



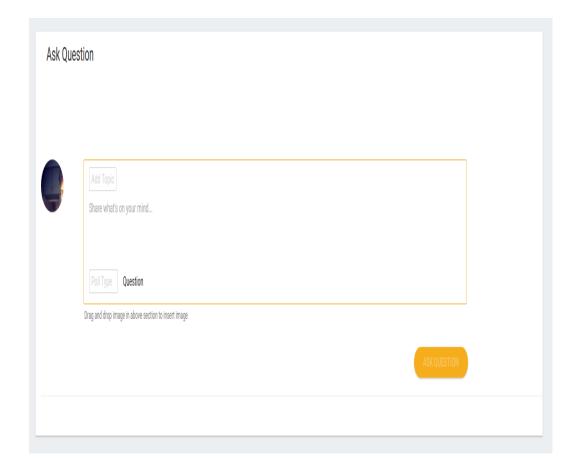
## 7) Ask Mentor Sessions Question Screen



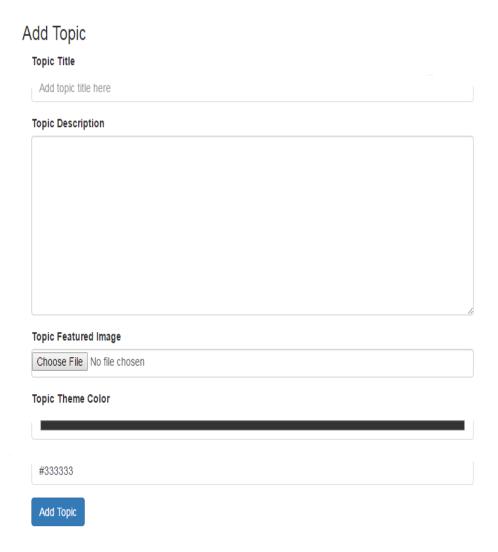
# 8) Create Poll Screen



# 9) Create Question Screen



# 10) Create Topic Screen



#### 3.13 Data Dictionary

1] Table Name: Admin

| Sr.<br>No. | Field Name      | Data Type   | Description              |
|------------|-----------------|-------------|--------------------------|
| 1          | User_id         | Int(11)     | Primary key of the table |
| 2          | User_name       | Varchar(50) | Key to identify admin    |
| 3          | Password        | Varchar(12) | Admin password           |
| 4          | Access_level    | Varchar(20) | Access level of admin    |
| 4          | User_first_name | Varchar(50) | First name of the user   |
| 5          | User_last_name  | Varchar(50) | Last name of the         |
|            |                 |             | user                     |

2 ] Table Name : Subscriber

| Sr. | Field Name      | Data Type   | Description        |
|-----|-----------------|-------------|--------------------|
| No. |                 |             |                    |
| 1   | User_id         | Int(11)     | Primary key of the |
|     |                 |             | table              |
| 2   | User_name       | Varchar(50) | Key to identify    |
|     |                 |             | admin              |
| 3   | Password        | Varchar(12) | Admin password     |
|     |                 |             |                    |
| 4   | User_first_name | Varchar(50) | First name of the  |
|     |                 |             | user               |
| 5   | User_last_name  | Varchar(50) | Last name of the   |
|     |                 |             | user               |
| 6   | ls_premium_user | Boolean     | Flag to set to     |
|     |                 |             | premium users      |

| 7 | User_stripe_account_no | Varchar(20) | Stripe account |
|---|------------------------|-------------|----------------|
|   |                        |             | identifier     |

#### 3 ] Table Name : Mentor

| Sr.<br>No. | Field Name      | Data Type   | Description              |
|------------|-----------------|-------------|--------------------------|
| 1          | User_id         | Int(11)     | Primary key of the table |
| 2          | User_name       | Varchar(50) | Key to identify admin    |
| 3          | Password        | Varchar(12) | Admin password           |
| 4          | Access_level    | Varchar(20) | Access level of admin    |
| 4          | User_first_name | Varchar(50) | First name of the user   |
| 5          | User_last_name  | Varchar(50) | Last name of the user    |

#### 4] Table Name: Profile

| Sr. | Field Name            | Data Type     | Description      |
|-----|-----------------------|---------------|------------------|
| No. |                       |               |                  |
| 1   | Profile_id            | Int(11)       | Primary key of   |
|     |                       |               | Profile          |
| 2   | Profile_display_name  | Varchar(50)   | Display name of  |
|     |                       |               | user             |
| 3   | Profile_user_bio      | Varchar(2048) | Bio information  |
|     |                       |               | of user          |
| 4   | Profile_display_image | Varchar(2048) | Display image of |
|     |                       |               | the user         |
| 5   | Profile_modify_date   | Date          | Date of profile  |
|     |                       |               | modification     |

| 6  | Profile_user_website    | JSON    | Website        |
|----|-------------------------|---------|----------------|
|    |                         |         | information of |
|    |                         |         | user           |
| 7  | Profile_user_university | JSON    | University     |
|    |                         |         | information of |
|    |                         |         | user           |
| 8  | Profile_user_address    | JSON    | Address        |
|    |                         |         | information of |
|    |                         |         | user           |
| 9  | Profile_user_contact    | JSON    | Contact        |
|    |                         |         | information of |
|    |                         |         | user           |
| 10 | User_id                 | Int(11) | User_id to     |
|    |                         |         | which profile  |
|    |                         |         | belongs to     |
| 11 | Campaign_resource       | JSON    | Campaign       |
|    |                         |         | resources      |

#### 5 ] Table Name : Campaign

| Sr. | Field Name           | Data Type   | Description    |
|-----|----------------------|-------------|----------------|
| No. |                      |             |                |
| 1   | Campaign_id          | Int(11)     | Primary key of |
|     |                      |             | campaign       |
| 2   | Campaign_title       | Varchar(50) | Title of the   |
|     |                      |             | campaign       |
| 3   | Campaign_blurb       | Varchar(50) | Campaign       |
|     |                      |             | Description    |
| 4   | Campaign_create_date | Date        | Date of        |
|     |                      |             | campaign       |
|     |                      |             | creation       |
| 5   | Campaign_start_date  | Date        | Campaign start |
|     |                      |             | date           |
| 6   | Campaign_end_date    | Date        | Campaign end   |
|     |                      |             | date           |

| 7  | Campaign_goal          | Bigint(20) | Funding goal of |
|----|------------------------|------------|-----------------|
|    |                        |            | campaign        |
| 8  | Campaign_funded_amount | Bigint(20) | Amount funded   |
|    |                        |            | to campaign     |
| 9  | Campaign_featured      | Boolean    | Flag to set     |
|    |                        |            | featured        |
|    |                        |            | campaign        |
| 10 | Campaign_category      | JSON       | Campaign        |
|    |                        |            | categories      |
| 11 | Campaign_resource      | JSON       | Campaign        |
|    |                        |            | resources       |
| 12 | Campaign_reward        | JSON       | Reward          |
|    |                        |            | information for |
|    |                        |            | donors          |

#### 6 ] Table Name : Donation

| Sr. | Field Name      | Data Type     | Description       |
|-----|-----------------|---------------|-------------------|
| No. |                 |               |                   |
| 1   | Transaction_id  | Int(11)       | Primary key of    |
|     |                 |               | donation          |
| 2   | Campaign_id     | Int(11)       | Campaign id of    |
|     |                 |               | donation          |
| 3   | Donation_amount | Bigint(20)    | Donated Amount    |
|     |                 |               |                   |
| 4   | Donor_id        | Int(11)       | User_id of the    |
|     |                 |               | donor             |
| 5   | Donation_date   | Date          | Date of donation  |
|     |                 |               |                   |
| 6   | Donor_relation  | Varchar(20)   | Relation of donor |
|     |                 |               | with campaign     |
|     |                 |               | owner             |
| 7   | Donation_remark | Varchar(2048) | Remarks given at  |
|     |                 |               | the time of       |
|     |                 |               | donation          |

# 7] Table Name: Category

| Sr. | Field Name             | Data Type    | Description      |
|-----|------------------------|--------------|------------------|
| No. |                        |              |                  |
| 1   | Category_id            | Int(11)      | Primary key of   |
|     |                        |              | category         |
| 2   | Category_name          | Varchar(45)  | Name of          |
|     |                        |              | category         |
| 3   | Category_description   | Varchar(100) | Category         |
|     |                        |              | description      |
| 4   | Category_disabled      | Boolean      | Disable category |
|     |                        |              | flag             |
| 5   | Category_created_date  | Date         | Date of category |
|     |                        |              | creation         |
| 6   | Category_modified_date | Date         | Date of category |
|     |                        |              | modification     |

## 8 ] Table Name : Course

| Sr.<br>No. | Field Name              | Data Type    | Description                         |
|------------|-------------------------|--------------|-------------------------------------|
| 1          | Course_id               | Int(11)      | Primary key of course               |
| 2          | Course_name             | Varchar(45)  | Name of course                      |
| 3          | Course_description      | Varchar(100) | Course description                  |
| 4          | Course_image            | Varchar(45)  | Display image of course             |
| 5          | Course_fee              | Bigint(20)   | Fees of course                      |
| 6          | Course_category         | Int(11)      | Category to which course belongs to |
| 7          | Course_content_resource | JSON         | Course content resources            |

| 8 | Course_visible    | Boolean | Course visibility |
|---|-------------------|---------|-------------------|
|   |                   |         | flag              |
| 9 | Course_created_by | Int(11) | User id of        |
|   |                   |         | admin who         |
|   |                   |         | created course    |

#### 9 ] Table Name : Course\_content

| Sr.<br>No. | Field Name               | Data Type   | Description      |
|------------|--------------------------|-------------|------------------|
| 1          | Course_content_id        | Int(11)     | Primary key of   |
|            |                          |             | course content   |
| 2          | Course_content_title     | Varchar(45) | Name of course   |
|            |                          |             | content          |
| 3          | Course_id                | Int(11)     | Course id of the |
|            |                          |             | course content   |
| 4          | Course_content_published | Boolean     | Display flag for |
|            |                          |             | course content   |

#### 10 ] Table Name : Course\_mentor

| Sr. | Field Name       | Data Type | Description      |
|-----|------------------|-----------|------------------|
| No. |                  |           |                  |
| 1   | Course_mentor_id | Int(11)   | Primary key of   |
|     |                  |           | table            |
| 3   | Course_id        | Int(11)   | Course id of the |
|     |                  |           | course           |
| 4   | Mentor_id        | Int(11)   | User id of the   |
|     |                  |           | mentor           |

## 11 ] Table Name : Post

| Sr.<br>No. | Field Name          | Data Type     | Description                                  |
|------------|---------------------|---------------|--|
| 1          | Post_id             | Int(11)       | Primary key of post                          |
| 2          | Post_title          | Varchar(45)   | Post title                                   |
| 3          | Post_content        | Varchar(5120) | Post content                                 |
| 4          | Post_created        | Date          | Date of creation                             |
| 5          | Post_modified       | Date          | Date of modification                         |
| 6          | Post_category_id    | Int(11)       | Category to which post belongs to            |
| 7          | Post_topic          | JSON          | Post topic information                       |
| 8          | Post_status         | Varchar(20)   | Status of post                               |
| 9          | Post_comment_status | Varchar(20)   | Comment status on post                       |
| 10         | Post_meta           | Varchar(20)   | Misc information about post                  |
| 11         | Post_type           | Varchar(20)   | Type of post                                 |
| 12         | Post_approved_by    | Int(11)       | User id of admin<br>who approved<br>the post |
| 13         | Group_id            | Int(11)       | Group_id of the post if it's a group post    |
| 14         | Post_author         | Int(11)       | Post author id                               |

## 12 ] Table Name : Friend

| Sr.<br>No | Field Name                  | Data Type   | Descriptio<br>n |
|-----------|-----------------------------|-------------|-----------------|
| 1         | Friend_request_by           | Int(11)     | User id of      |
|           |                             |             | the user        |
|           |                             |             | who             |
|           |                             |             | initiated       |
|           |                             |             | friend          |
|           |                             |             | request         |
| 2         | Friend_request_to           | Int(11)     | User id of      |
|           |                             |             | the user to     |
|           |                             |             | whom            |
|           |                             |             | friend          |
|           |                             |             | request is      |
|           |                             |             | sent            |
| 3         | Friend_request_message      | Varchar(100 | Message         |
|           |                             | )           | sent along      |
|           |                             |             | with            |
|           |                             |             | request         |
| 4         | Friend_request_pending      | Boolean     | Friend          |
|           |                             |             | request         |
|           |                             |             | pending         |
|           |                             |             | flag            |
| 5         | Friend_request_accepted     | Boolean     | Friend          |
|           |                             |             | request         |
|           |                             |             | accept flag     |
| 6         | Friend_request_date         | Date        | Date of         |
|           |                             |             | request         |
| 7         | Friend_request_response_dat | Date        | Date of         |
|           | е                           |             | response        |
|           |                             |             | to the          |
|           |                             |             | request         |

#### 13 ] Table Name : Group

| Sr. | Field Name        | Data Type    | Description    |
|-----|-------------------|--------------|----------------|
| No. |                   |              |                |
| 1   | Group_id          | Int(11)      | Group table    |
|     |                   |              | primary key    |
| 2   | Group_name        | Varchar(50)  | Name of th     |
|     |                   |              | group          |
| 3   | Group_description | Varchar(256) | Description of |
|     |                   |              | group          |
| 4   | Group_admin       | Int(11)      | User_id of     |
|     |                   |              | admin who      |
|     |                   |              | created group  |
| 5   | Group_permission  | Varchar(20)  | Group          |
|     |                   |              | permissions    |

#### 14 ] Table Name : Group\_member

| Sr.<br>No. | Field Name   | Data Type | Description                       |
|------------|--------------|-----------|-----------------------------------|
| 1          | Group_id     | Int(11)   | Group_id of group                 |
| 3          | User_id      | Int(11)   | User_id of the user               |
| 4          | Group_joined | Date      | Date of joining                   |
| 5          | Group_left   | Date      | Date at which user left the group |

#### 15 ] Table Name : Messages

| Sr.<br>No. | Field Name | Data Type | Description              |
|------------|------------|-----------|--------------------------|
| 1          | Message_id | Int(11)   | Message_id of<br>Message |

| 3 | Message_from    | Int(11)       | User_id of the user |
|---|-----------------|---------------|---------------------|
|   |                 |               | who sent message    |
| 4 | Message_to      | Int(11)       | User_id of user to  |
|   |                 |               | which message       |
|   |                 |               | was sent            |
| 5 | Message_title   | Varchar(100)  | Title of message    |
| 6 | Message_content | Varchar(5120) | Message content     |
| 7 | Message_read    | Boolean       | Read message flag   |
| 8 | Group_id        | Int(11)       | Group_id of group   |
|   |                 |               | if it's a group     |
|   |                 |               | message             |
| 9 | Message_date    | Date          | Date of message     |

## 16] Table Name: Topic

| Sr. | Field Name        | Data Type     | Description                   |
|-----|-------------------|---------------|-------------------------------|
| No. |                   |               |                               |
| 1   | Topic_id          | Int(11)       | Topic_id of Topic             |
| 3   | Topic_title       | Varchar(20)   | Title of topic                |
| 4   | Topic_description | Varchar(2048) | Description of topic          |
| 5   | Topic_image       | Varchar(2048) | Source path of topic image    |
| 6   | Topic_color       | Char(6)       | Hex color code of topic color |

## 17 ] Table Name : Comment

| Sr.<br>No. | Field Name       | Data Type     | Description                    |
|------------|------------------|---------------|--------------------------------|
| 1          | Comment_id       | Int(11)       | Primary key of comment         |
| 2          | Comment_post_id  | Int(11)       | Post id of comment             |
| 3          | Comment_content  | Varchar(5120) | Comment content                |
| 4          | Comment_created  | Date          | Date of creation               |
| 5          | Comment_modified | Date          | Date of modification           |
| 6          | Comment_approved | Boolean       | Comment approval flag          |
| 7          | Comment_author   | Int(11)       | Comment author id              |
| 8          | Comment_status   | Varchar(20)   | Status of comment              |
| 9          | Comment_parent   | Int(11)       | Parent Comment id              |
| 10         | Comment_meta     | Varchar(20)   | Misc information about comment |
| 11         | Comment_type     | Varchar(20)   | Type of comment                |

#### 18 ] Table Name : Project

| Sr. | Field Name          | Data Type     | Description         |
|-----|---------------------|---------------|---------------------|
| No. |                     |               |                     |
| 1   | Project_id          | Int(11)       | Primary key of      |
|     |                     |               | Project             |
| 2   | Project_title       | Int(11)       | Title of project    |
| 3   | Project_description | Varchar(5120) | Project description |

| 4  | Project_created  | Date        | Date of creation            |
|----|------------------|-------------|-----------------------------|
| 5  | Project_modified | Date        | Date of modification        |
| 6  | Project_owner    | Int(11)     | User id of project<br>owner |
| 7  | Project_resource | JSON        | Project resources           |
| 8  | Project_goal     | Varchar(20) | Goal of project             |
| 9  | Project_end_date | Date        | Project end date            |
| 10 | Project_status   | Varchar(20) | Status of project           |

### 19] Table Name: Project\_member

| Sr.<br>No. | Field Name | Data Type | Description        |
|------------|------------|-----------|--------------------|
| 1          | Project_id | Int(11)   | Project_id of      |
|            |            |           | Project            |
| 3          | Member_id  | Int(11)   | User_id of project |
|            |            |           | member             |
| 4          | Group_id   | Int(11)   | Group_id of        |
|            |            |           | project            |

### 20 ] Table Name : Task

| Sr.<br>No. | Field Name | Data Type    | Description            |
|------------|------------|--------------|------------------------|
| 1          | Task_id    | Int(11)      | Primary key of<br>Task |
| 2          | Project_id | Int(11)      | Project_id of project  |
| 3          | Task_title | Varchar(100) | Task title             |

| 4  | Task_description | Varchar(5120) | Task description     |
|----|------------------|---------------|----------------------|
| 5  | Task_created     | Date          | Date of creation     |
| 6  | Task_modified    | Date          | Date of modification |
| 9  | Task_resource    | JSON          | Task resources       |
| 10 | Task_goal        | Varchar(20)   | Goal of Task         |
| 11 | Task_end_date    | Date          | Task end date        |
| 12 | Task_comment     | Varchar(20)   | Comments on task     |
| 13 | Task_status      | Varchar(20)   | Status of task       |

# 21 ] Table Name : Task\_user

| Sr.<br>No. | Field Name | Data Type | Description  |
|------------|------------|-----------|--|
| 1          | Task_id    | Int(11)   | Task_id of Task                                      |
| 3          | Member_id  | Int(11)   | User_id of user to whom task was assigned to         |
| 4          | Group_id   | Int(11)   | Group_id of group<br>to whom task was<br>assigned to |

### 3.14 Table Specifications

1] Table Name: Admin

| Sr. | Field Name      | Data Type   | Constraint | Description   |
|-----|-----------------|-------------|------------|---------------|
| No. |                 |             |            |               |
| 1   | User_id         | Int(11)     | PK         | Primary key   |
|     |                 |             |            | of the table  |
| 2   | User_name       | Varchar(50) | Not null   | Key to        |
|     |                 |             |            | identify      |
|     |                 |             |            | admin         |
| 3   | Password        | Varchar(12) | Not null   | Admin         |
|     |                 |             |            | password      |
| 4   | Access_level    | Varchar(20) | Not null   | Access level  |
|     |                 |             |            | of admin      |
| 4   | User_first_name | Varchar(50) |            | First name of |
|     |                 |             |            | the user      |
| 5   | User_last_name  | Varchar(50) |            | Last name of  |
|     |                 |             |            | the user      |

2 ] Table Name : Subscriber

| Sr. | Field Name      | Data Type | Constrai | Descriptio |
|-----|-----------------|-----------|----------|------------|
| No  |                 |           | nt       | n          |
| •   |                 |           |          |            |
| 1   | User_id         | Int(11)   | PK       | Primary    |
|     |                 |           |          | key of the |
|     |                 |           |          | table      |
| 2   | User_name       | Varchar(5 | Not null | Key to     |
|     |                 | 0)        |          | identify   |
|     |                 |           |          | admin      |
| 3   | Password        | Varchar(1 | Not null | Admin      |
|     |                 | 2)        |          | password   |
| 4   | User_first_name | Varchar(5 |          | First name |
|     |                 | 0)        |          | of the     |
|     |                 |           |          | user       |

| 5 | User_last_name       | Varchar(5 |           | Last name   |
|---|----------------------|-----------|-----------|-------------|
|   |                      | 0)        |           | of the      |
|   |                      |           |           | user        |
| 6 | ls_premium_user      | Boolean   | Not null  | Flag to set |
|   |                      |           | Default : | to          |
|   |                      |           | False     | premium     |
|   |                      |           |           | users       |
| 7 | User_stripe_account_ | Varchar(2 |           | Stripe      |
|   | no                   | 0)        |           | account     |
|   |                      |           |           | identifier  |

### 3 ] Table Name : Mentor

| Sr. | Field Name      | Data Type   | Constraint | Description  |
|-----|-----------------|-------------|------------|--------------|
| No. |                 |             |            |              |
| 1   | User_id         | Int(11)     | PK         | Primary key  |
|     |                 |             |            | of the table |
| 2   | User_name       | Varchar(50) | Not null   | Key to       |
|     |                 |             |            | identify     |
|     |                 |             |            | admin        |
| 3   | Password        | Varchar(12) | Not null   | Admin        |
|     |                 |             |            | password     |
| 4   | Access_level    | Varchar(20) | Not null   | Access level |
|     |                 |             |            | of admin     |
| 4   | User_first_name | Varchar(50) |            | First name   |
|     |                 |             |            | of the user  |
| 5   | User_last_name  | Varchar(50) |            | Last name    |
|     |                 |             |            | of the user  |

### 4] Table Name: Profile

| Sr.<br>No | Field Name                | Data Type         | Constrai<br>nt | Descriptio<br>n                     |
|-----------|---------------------------|-------------------|----------------|-------------------------------------|
| 1         | Profile_id                | Int(11)           | PK             | Primary<br>key of<br>Profile        |
| 2         | Profile_display_nam<br>e  | Varchar(50)       |                | Display<br>name of<br>user          |
| 3         | Profile_user_bio          | Varchar(204<br>8) |                | Bio<br>informatio<br>n of user      |
| 4         | Profile_display_ima<br>ge | Varchar(204<br>8) |                | Display<br>image of<br>the user     |
| 5         | Profile_modify_dat<br>e   | Date              |                | Date of profile modificati on       |
| 6         | Profile_user_websit<br>e  | JSON              |                | Website informatio n of user        |
| 7         | Profile_user_univer sity  | JSON              |                | University informatio n of user     |
| 8         | Profile_user_addres<br>s  | JSON              |                | Address informatio n of user        |
| 9         | Profile_user_contac<br>t  | JSON              |                | Contact informatio n of user        |
| 10        | User_id                   | Int(11)           | FK<br>Not null | User_id to which profile belongs to |

| 11 | Campaign_resource | JSON | Campaign  |
|----|-------------------|------|-----------|
|    |                   |      | resources |

### 5 ] Table Name : Campaign

| Sr.<br>No | Field Name           | Data<br>Type | Constrai<br>nt | Descripti<br>on |
|-----------|----------------------|--------------|----------------|-----------------|
| 1         | Campaign_id          | Int(11)      | PK             | Primary         |
|           |                      |              |                | key of          |
|           |                      |              |                | campaign        |
| 2         | Campaign_title       | Varchar(5    | Not null       | Title of        |
|           |                      | 0)           |                | the             |
|           |                      |              |                | campaign        |
| 3         | Campaign_blurb       | Varchar(5    | Not null       | Campaign        |
|           |                      | 0)           |                | Descriptio      |
|           |                      |              |                | n               |
| 4         | Campaign_create_date | Date         | Not null       | Date of         |
|           |                      |              |                | campaign        |
|           |                      |              |                | creation        |
| 5         | Campaign_start_date  | Date         | Not null       | Campaign        |
|           |                      |              |                | start date      |
| 6         | Campaign_end_date    | Date         | Not null       | Campaign        |
|           |                      |              |                | end date        |
| 7         | Campaign_goal        | Bigint(20)   | Not null       | Funding         |
|           |                      |              |                | goal of         |
|           |                      |              |                | campaign        |
| 8         | Campaign_funded_am   | Bigint(20)   | Not null       | Amount          |
|           | ount                 |              | Default :      | funded to       |
|           |                      |              | 0              | campaign        |
| 9         | Campaign_featured    | Boolean      | Not null       | Flag to set     |
|           |                      |              | Default :      | featured        |
|           |                      |              | False          | campaign        |
| 10        | Campaign_category    | JSON         | Not null       | Campaign        |
|           |                      |              |                | categories      |

| 11 | Campaign_resource | JSON | Campaign  |
|----|-------------------|------|-----------|
|    |                   |      | resources |
| 12 | Campaign_reward   | JSON | Reward    |
|    |                   |      | informati |
|    |                   |      | on for    |
|    |                   |      | donors.   |

### 6 ] Table Name : Donation

| Sr.<br>No | Field Name          | Data Type         | Constraint                           | Descripti<br>on                                   |
|-----------|---------------------|-------------------|--------------------------------------|---|
| 1         | Transaction_id      | Int(11)           | PK                                   | Primary<br>key of<br>donation                     |
| 2         | Campaign_id         | Int(11)           | FK<br>Not null                       | Campaign id of donation                           |
| 3         | Donation_amo<br>unt | Bigint(20)        | Not null Check: Donation_amo unt > 0 | Donated<br>Amount                                 |
| 4         | Donor_id            | Int(11)           | FK<br>Not null                       | User_id<br>of the<br>donor                        |
| 5         | Donation_date       | Date              | Not null                             | Date of donation                                  |
| 6         | Donor_relation      | Varchar(20)       |                                      | Relation<br>of donor<br>with<br>campaign<br>owner |
| 7         | Donation_rema<br>rk | Varchar(20<br>48) |                                      | Remarks<br>given for<br>donation                  |

# 7] Table Name: Category

| Sr.<br>No | Field Name                 | Data Type        | Constrai<br>nt                 | Descriptio<br>n                |
|-----------|----------------------------|------------------|--------------------------------|--------------------------------|
| 1         | Category_id                | Int(11)          | PK                             | Primary<br>key of<br>category  |
| 2         | Category_name              | Varchar(45       | Not null                       | Name of category               |
| 3         | Category_description       | Varchar(10<br>0) |                                | Category<br>descriptio<br>n    |
| 4         | Category_disabled          | Boolean          | Not null<br>Default :<br>False | Disable<br>category<br>flag    |
| 5         | Category_created_da<br>te  | Date             | Not null                       | Date of category creation      |
| 6         | Category_modified_d<br>ate | Date             |                                | Date of category modificati on |

### 8 ] Table Name : Course

| Sr.<br>No | Field Name         | Data Type        | Constrai<br>nt | Descripti<br>on             |
|-----------|--------------------|------------------|----------------|-----------------------------|
| 1         | Course_id          | Int(11)          | PK             | Primary<br>key of<br>course |
| 2         | Course_name        | Varchar(45       | Not null       | Name of course              |
| 3         | Course_description | Varchar(10<br>0) | Not null       | Course descriptio           |

|   |                             |                 |                                | n   |
|---|-----------------------------|-----------------|--------------------------------|---|
| 4 | Course_image                | Varchar(45<br>) | Not null                       | Display image of course                         |
| 5 | Course_fee                  | Bigint(20)      | Not null<br>Default :<br>0     | Fees of<br>course                               |
| 6 | Course_category             | Int(11)         |                                | Category<br>to which<br>course<br>belongs<br>to |
| 7 | Course_content_reso<br>urce | JSON            |                                | Course<br>content<br>resources                  |
| 8 | Course_visible              | Boolean         | Not null<br>Default :<br>False | Course<br>visibility<br>flag                    |
| 9 | Course_created_by           | Int(11)         | FK<br>Not null                 | User id of admin who created course             |

### 9 ] Table Name : Course\_content

| Sr. | Field Name           | Data Type | Constrai | Descripti |
|-----|----------------------|-----------|----------|-----------|
| No  |                      |           | nt       | on        |
| •   |                      |           |          |           |
| 1   | Course_content_id    | Int(11)   | PK       | Primary   |
|     |                      |           |          | key of    |
|     |                      |           |          | course    |
|     |                      |           |          | content   |
| 2   | Course_content_title | Varchar(4 | Not null | Name of   |
|     |                      | 5)        |          | course    |

|   |                       |         |           | content   |
|---|-----------------------|---------|-----------|-----------|
|   |                       |         |           |           |
| 3 | Course_id             | Int(11) | FK        | Course id |
|   |                       |         | Not null  | of the    |
|   |                       |         |           | course    |
|   |                       |         |           | content   |
| 4 | Course_content_publis | Boolean | Not null  | Display   |
|   | hed                   |         | Default : | flag for  |
|   |                       |         | False     | course    |
|   |                       |         |           | content   |

10 ] Table Name : Course\_mentor

| Sr. | Field Name       | Data    | Constraint | Description  |
|-----|------------------|---------|------------|--------------|
| No. |                  | Type    |            |              |
| 1   | Course_mentor_id | Int(11) | PK         | Primary key  |
|     |                  |         |            | of table     |
| 3   | Course_id        | Int(11) | FK         | Course id of |
|     |                  |         | Not null   | the course   |
| 4   | Mentor_id        | Int(11) | FK         | User id of   |
|     |                  |         | Not null   | the mentor   |

11 ] Table Name : Post

| Sr. | Field Name   | Data Type   | Constrai | Descriptio  |
|-----|--------------|-------------|----------|-------------|
| No  |              |             | nt       | n           |
| •   |              |             |          |             |
| 1   | Post_id      | Int(11)     | PK       | Primary     |
|     |              |             |          | key of post |
| 2   | Post_title   | Varchar(45) |          | Post title  |
| 3   | Post_content | Varchar(512 |          | Post        |
|     |              | 0)          |          | content     |
| 4   | Post_created | Date        | Not null | Date of     |
|     |              |             |          | creation    |

| 5  | Post_modified    | Date        |           | Date of     |
|----|------------------|-------------|-----------|-------------|
|    |                  |             |           | modificati  |
|    |                  |             |           | on          |
| 6  | Post_category_id | Int(11)     |           | Category    |
|    |                  |             |           | to which    |
|    |                  |             |           | post        |
|    |                  |             |           | belongs to  |
| 7  | Post_topic       | JSON        |           | Post topic  |
|    |                  |             |           | informatio  |
|    |                  |             |           | n           |
| 8  | Post_status      | Varchar(20) | Not null  | Status of   |
|    |                  |             | Default : | post        |
|    |                  |             | draft     |             |
| 9  | Post_comment_sta | Varchar(20) | Not null  | Comment     |
|    | tus              |             | Default : | status on   |
|    |                  |             | open      | post        |
| 10 | Post_meta        | Varchar(20) |           | Misc        |
|    |                  |             |           | informatio  |
|    |                  |             |           | n about     |
|    |                  |             |           | post        |
| 11 | Post_type        | Varchar(20) | Not null  | Type of     |
|    |                  |             |           | post        |
| 12 | Post_approved_by | Int(11)     | FK        | User id of  |
|    |                  |             | Not null  | admin who   |
|    |                  |             |           | approved    |
|    |                  |             |           | the post    |
| 13 | Group_id         | Int(11)     |           | Group_id    |
|    |                  |             |           | of the post |
|    |                  |             |           | if it's a   |
|    |                  |             |           | group post  |
| 14 | Post_author      | Int(11)     | FK        | Post        |
|    |                  |             | Not null  | author id   |

### 12 ] Table Name : Friend

| Sr.<br>N<br>o. | Field Name                       | Data Type        | Constrai<br>nt                 | Descripti<br>on                                    |
|----------------|----------------------------------|------------------|--------------------------------|--|
| 1              | Friend_request_by                | Int(11)          | FK<br>Not null                 | User id of the user who initiated friend request   |
| 2              | Friend_request_to                | Int(11)          | FK<br>Not null                 | User id of the user to whom friend request is sent |
| 3              | Friend_request_message           | Varchar(1<br>00) |                                | Message<br>sent<br>along<br>with<br>request        |
| 4              | Friend_request_pending           | Boolean          | Not null<br>Default :<br>True  | Friend<br>request<br>pending<br>flag               |
| 5              | Friend_request_accepte<br>d      | Boolean          | Not null<br>Default :<br>False | Friend<br>request<br>accept<br>flag                |
| 6              | Friend_request_date              | Date             | Not null                       | Date of request                                    |
| 7              | Friend_request_respons<br>e_date | Date             |                                | Date of response to the request                    |

### 13 ] Table Name : Group

| Sr.<br>No | Field Name       | Data Type   | Constrain<br>t | Description |
|-----------|------------------|-------------|----------------|-------------|
| 1         | Group_id         | Int(11)     | PK             | Group       |
|           |                  |             |                | table       |
|           |                  |             |                | primary     |
|           |                  |             |                | key         |
| 2         | Group_name       | Varchar(50) | Not null       | Name of th  |
|           |                  |             |                | group       |
| 3         | Group_descriptio | Varchar(256 |                | Description |
|           | n                | )           |                | of group    |
| 4         | Group_admin      | Int(11)     | FK             | User_id of  |
|           |                  |             | Not null       | admin who   |
|           |                  |             |                | created     |
|           |                  |             |                | group       |
| 5         | Group_permissio  | Varchar(20) | Not null       | Group       |
|           | n                |             |                | permission  |
|           |                  |             |                | S           |

### 14 ] Table Name : Group\_member

| Sr.<br>No. | Field Name   | Data<br>Type | Constraint | Description    |
|------------|--------------|--------------|------------|----------------|
| 1          | Group_id     | Int(11)      | FK         | Group_id of    |
|            |              |              | Not null   | group          |
| 3          | User_id      | Int(11)      | FK         | User_id of the |
|            |              |              | Not null   | user           |
| 4          | Group_joined | Date         | Not null   | Date of        |
|            |              |              |            | joining        |
| 5          | Group_left   | Date         |            | Date at which  |
|            |              |              |            | user left the  |
|            |              |              |            | group          |

# 15 ] Table Name : Messages

| Sr.<br>No | Field Name          | Data Type    | Constrain<br>t                 | Descriptio<br>n                                       |
|-----------|---------------------|--------------|--------------------------------|---|
| 1         | Message_id          | Int(11)      | PK                             | Message_i<br>d of<br>Message                          |
| 3         | Message_from        | Int(11)      | FK<br>Not null                 | User_id of<br>the user<br>who sent<br>message         |
| 4         | Message_to          | Int(11)      | FK<br>Not null<br>Default : 0  | User_id of<br>user to<br>which<br>message<br>was sent |
| 5         | Message_title       | Varchar(100) | Not null                       | Title of message                                      |
| 6         | Message_conten<br>t | Varchar(5120 |                                | Message content                                       |
| 7         | Message_read        | Boolean      | Not null<br>Default :<br>False | Read<br>message<br>flag                               |
| 8         | Group_id            | Int(11)      | FK<br>Not null<br>Default : 0  | Group_id of group if it's a group message             |
| 9         | Message_date        | Date         | Not null                       | Date of message                                       |

### 16] Table Name: Topic

| Sr. | Field Name       | Data Type    | Constrain | Descriptio  |
|-----|------------------|--------------|-----------|-------------|
| No  |                  |              | t         | n           |
| •   |                  |              |           |             |
| 1   | Topic_id         | Int(11)      | PK        | Topic_id of |
|     |                  |              |           | Topic       |
| 3   | Topic_title      | Varchar(20)  | Not null  | Title of    |
|     |                  |              |           | topic       |
| 4   | Topic_descriptio | Varchar(2048 |           | Description |
|     | n                | )            |           | of topic    |
| 5   | Topic_image      | Varchar(2048 |           | Source      |
|     |                  | )            |           | path of     |
|     |                  |              |           | topic       |
|     |                  |              |           | image       |
| 6   | Topic_color      | Char(6)      | Not null  | Hex color   |
|     |                  |              | Default : | code of     |
|     |                  |              | #333      | topic color |

### 17 ] Table Name : Comment

| Sr. | Field Name      | Data Type   | Constrai | Descriptio  |
|-----|-----------------|-------------|----------|-------------|
| No  |                 |             | nt       | n           |
| •   |                 |             |          |             |
| 1   | Comment_id      | Int(11)     | PK       | Primary     |
|     |                 |             |          | key of      |
|     |                 |             |          | comment     |
| 2   | Comment_post_id | Int(11)     | FK       | Post id of  |
|     |                 |             | Not null | comment     |
| 3   | Comment_content | Varchar(512 | Not null | Comment     |
|     |                 | 0)          |          | content     |
| 4   | Comment_created | Date        | Not null | Date of     |
|     |                 |             |          | creation    |
| 5   | Comment_modifie | Date        |          | Date of     |
|     | d               |             |          | modificatio |
|     |                 |             |          | n           |

| 6  | Comment_approv | Boolean     | Not null  | Comment    |
|----|----------------|-------------|-----------|------------|
|    | ed             |             | Default : | approval   |
|    |                |             | True      | flag       |
| 7  | Comment_author | Int(11)     | FK        | Comment    |
|    |                |             | Not null  | author id  |
| 8  | Comment_status | Varchar(20) | Not null  | Status of  |
|    |                |             |           | comment    |
| 9  | Comment_parent | Int(11)     | Not null  | Parent     |
|    |                |             | Default : | Comment    |
|    |                |             | 0         | id         |
| 10 | Comment_meta   | Varchar(20) |           | Misc       |
|    |                |             |           | informatio |
|    |                |             |           | n about    |
|    |                |             |           | comment    |
| 11 | Comment_type   | Varchar(20) | Not null  | Type of    |
|    |                |             |           | comment    |

### 18] Table Name: Project

| Sr. | Field Name         | Data Type   | Constrain | Description |
|-----|--------------------|-------------|-----------|-------------|
| No  |                    |             | t         |             |
| •   |                    |             |           |             |
| 1   | Project_id         | Int(11)     | PK        | Primary     |
|     |                    |             |           | key of      |
|     |                    |             |           | Project     |
| 2   | Project_title      | Int(11)     | Not null  | Title of    |
|     |                    |             |           | project     |
| 3   | Project_descriptio | Varchar(512 |           | Project     |
|     | n                  | 0)          |           | description |
| 4   | Project_created    | Date        | Not null  | Date of     |
|     |                    |             |           | creation    |
| 5   | Project_modified   | Date        |           | Date of     |
|     |                    |             |           | modificatio |
|     |                    |             |           | n           |
| 6   | Project_owner      | Int(11)     | FK        | User id of  |
|     |                    |             | Not null  | project     |

|    |                  |             |          | owner       |
|----|------------------|-------------|----------|-------------|
| 7  | Project_resource | JSON        |          | Project     |
|    |                  |             |          | resources   |
| 8  | Project_goal     | Varchar(20) | Not null | Goal of     |
|    |                  |             |          | project     |
| 9  | Project_end_date | Date        | Not null | Project end |
|    |                  |             |          | date        |
| 10 | Project_status   | Varchar(20) | Not null | Status of   |
|    |                  |             |          | project     |

### 19] Table Name: Project\_member

| Sr. | Field Name | Data    | Constraint  | Description   |
|-----|------------|---------|-------------|---------------|
| No. |            | Туре    |             |               |
| 1   | Project_id | Int(11) | FK          | Project_id of |
|     |            |         | Not null    | Project       |
| 3   | Member_id  | Int(11) | FK          | User_id of    |
|     |            |         | Not null    | project       |
|     |            |         | Default : 0 | member        |
| 4   | Group_id   | Int(11) | FK          | Group_id of   |
|     |            |         | Not null    | project       |
|     |            |         | Default : 0 |               |

### 20 ] Table Name : Task

| Sr. | Field Name | Data Type    | Constrain | Description |
|-----|------------|--------------|-----------|-------------|
| No  |            |              | t         |             |
| •   |            |              |           |             |
| 1   | Task_id    | Int(11)      | PK        | Primary key |
|     |            |              |           | of Task     |
| 2   | Project_id | Int(11)      | FK        | Project_id  |
|     |            |              | Not null  | of project  |
| 3   | Task_title | Varchar(100) | Not null  | Task title  |

| 4  | Task_descriptio | Varchar(5120 |          | Task         |
|----|-----------------|--------------|----------|--------------|
|    | n               | )            |          | description  |
| 5  | Task_created    | Date         | Not null | Date of      |
|    |                 |              |          | creation     |
| 6  | Task_modified   | Date         |          | Date of      |
|    |                 |              |          | modificatio  |
|    |                 |              |          | n            |
| 9  | Task_resource   | JSON         |          | Task         |
|    |                 |              |          | resources    |
| 10 | Task_goal       | Varchar(20)  | Not null | Goal of Task |
|    |                 |              |          |              |
| 11 | Task_end_date   | Date         | Not null | Task end     |
|    |                 |              |          | date         |
| 12 | Task_comment    | Varchar(20)  |          | Comments     |
|    |                 |              |          | on task      |
| 13 | Task_status     | Varchar(20)  | Not null | Status of    |
|    |                 |              |          | task         |

### 21 ] Table Name : Task\_user

| Sr. | Field Name | Data    | Constraint  | Description  |
|-----|------------|---------|-------------|--------------|
| No. |            | Type    |             |              |
| 1   | Task_id    | Int(11) | FK          | Task_id of   |
|     |            |         | Not null    | Task         |
| 3   | Member_id  | Int(11) | FK          | User_id of   |
|     |            |         | Not null    | user to      |
|     |            |         | Default : 0 | whom task    |
|     |            |         |             | was assigned |
|     |            |         |             | to           |
| 4   | Group_id   | Int(11) | FK          | Group_id of  |
|     |            |         | Not null    | group to     |
|     |            |         | Default : 0 | whom task    |
|     |            |         |             | was assigned |
|     |            |         |             | to           |

#### 3.15 Test Procedures and Implementation

#### **Testing Introduction:**

Testing is the method of checking whether the software is performing the giventask successfully as expected or not. The expected speed, performance, accuracy and expected time should be taken into consideration while testing.

#### **Testing Objectives:**

- Testing is a process of executing a program with the intent of finding an error.
- A good test case is one that has a high probability of finding an undiscovered error.
- A successful test case is the one that unconvers an error which could restrict the system to behave in expected manner.
- Our objective is to design tests that systematically unconver different classes of errors and do so with a minimum amount of time and effort.

#### **Testing Methods:**

#### • Unit Testing:

A Unit testing focuses verification efforts on the smallest unit of software design the module. The unit test is normally white box oriented and the step can be conducted in parallel formultiple modules. In unit testing the module interface was tested to ensure that information properly flows into and out of a program unit under test. On testing individual units resultswere satisfactory and thus the accuracy and reliability of the unit was tested.

#### • Integration Testing:

Although each module is verified individually during modules testing, it is important todetermine if the modules are working properly when linked together. This is also referred to as integration testing or also as interfacing. In this step output is compared with the manuallycalculated output. This comparison gives the result of system testing. This finally ensures that the

system is functioning properly. On testing the results were satisfactory and thus theaccuracy and reliability of the integrated software was tested.

#### • System Testing:

It is the testing of the whole system prior to delivery. The purpose of system testingis to identify defects that will only surface when a complete system is assembled. i.e.defects that cannot be attributed to individual components or the interaction between twocomponents. System testing includes testing of performance, security, configurationsensitivity, start up and recovery from failure modes. On testing the results were satisfactory and thus the accuracy and reliability of the system was tested.

#### • GUI Testing:

Graphical user interface testing is the process of testing the user interface of theapplication to ensure it meets its

specifications. In addition to functionality, GUI testingevaluates design elements such as layout, colors, font sizes, labels, text boxes, text formatting, captions, buttons, lists, icons, links and content. On testing the results were satisfactory andthus the accuracy of UI was tested.

#### • Platform Testing:

For web-application, platform testing means four main points, viz. Web forms displaycorrectly on all supported browsers and supported versions of those browsers. The webapplication appropriately handles unsupported browser versions, such as by displaying instructions for downloading the required version. The web application has acceptable performance over slower forms of network connections such as modems. On testing the results were satisfactory and thus the accuracy and reliability of the system was tested.

#### • Performance Testing:

Performance testing, a non-functional testing technique performed to determine the system parameters in terms of responsiveness and stability under various workload. Performance testing measures the quality attributes of the system, such as scalability, reliability and resource usage.

#### o Load testing:

It is the simplest form of testing conducted to understand thebehavior of the system under a specific load on the database, application server, etc.

#### Stress testing:

It is performed to find the upper limit capacity of the system and also to determine how the system performs if the current load goes well above the expected maximum.

### Security Testing :

Security testing is a process intended to reveal flaws in the security mechanisms of asystem that protect data and maintain functionality as intended. Typical securityrequirements may include specific elements of confidentiality, integrity, authentication, availability, authorization and non-repudiation. On testing the results were satisfactory and thus the security of the system was tested.

### **Test Cases:**

| Sr.No. | Test Step  | Test Data   | Expected<br>Result   | Actual<br>Result              | Status |
|--------|------------|---|--|-------------------------------|--------|
| 1]Logi | n          |   |  |                               |        |
| 1      | Login Page | Leave all<br>fields blank                           | Error message should appear for username and password field        | Error<br>message<br>displayed | Pass   |
| 2      | Username   | Leave<br>username<br>blank and<br>enter<br>password | Error message should appear to enter valid username                | Error<br>message<br>dislpayed | Pass   |
| 3      | Password   | Leave<br>password<br>blank and<br>enter<br>username | Error<br>message<br>should<br>appear to<br>enter valid<br>password | Error<br>message<br>displayed | Pass   |
| 4      | Username   | Enter<br>invalid<br>username                        | Error message should appear to enter valid user name               | Error<br>message<br>displayed | Pass   |
| 5      | Username   | Enter valid username                                | It should<br>allow to<br>proceed                                   | It allowed proceeding         | Pass   |
| 6      | Password   | Enter<br>password                                   | Password<br>field  | Password<br>displayed         | Pass   |

| 7       | Password             | Enter<br>wrong<br>password                      | should<br>show<br>password<br>in<br>encrypted<br>format<br>Error<br>message<br>should<br>appear for<br>wrong<br>password | in<br>encrypted<br>format<br>Error<br>message<br>displayed | Pass |
|---------|----------------------|---|--|--|------|
| 2 ] Cam | paign                |   | 1  | <u> </u>   |      |
| 1       | Campaign<br>Title    | Leave<br>Campaign<br>Title field<br>blank       | Error message should appear saying "Campaign Title cannot be empty"  | Error<br>message<br>displayed                              | Pass |
| 2       | Campaign<br>Category | Leave<br>campaign<br>category<br>field<br>empty | Error message should appear saying "Campaign should belong to atleast one category"                                      | Error<br>message<br>displayed                              | Pass |
| 3       | Campaign<br>Blurb    | Leave<br>Campaign<br>blurb field<br>empty       | Error<br>message<br>should<br>appear   | Error<br>message<br>diplayed                               | Pass |

|          |            |                   | 1                 | ı         | , ,   |
|----------|------------|-------------------|-------------------|-----------|-------|
|          |            |                   | saying            |           |       |
|          |            |                   | "Campaign         |           |       |
|          |            |                   | blurb             |           |       |
|          |            |                   | cannot be         |           |       |
|          |            |                   | empty"            |           |       |
| 4        | Campaign   | Leave             | Error             | Error     | Pass  |
|          | Goal       | Campaign          | message           | message   |       |
|          |            | goal field        | should            | displayed |       |
|          |            | empty             | appear            | . ,       |       |
|          |            | ' '               | saying            |           |       |
|          |            |                   | "Campaign         |           |       |
|          |            |                   | goal field        |           |       |
|          |            |                   | cannot be         |           |       |
|          |            |                   | empty"            |           |       |
| 5        | Campaign   | Leave             | Alert             | Alert     | Pass  |
|          | Start Date | Campaign          | message           | message   | 1 433 |
|          | Start Bate | start date        | should            | displayed |       |
|          |            | field             | appear            | aispiayea |       |
|          |            | unchanged         | saying            |           |       |
|          |            | anchangea         | "Are you          |           |       |
|          |            |                   | sure you          |           |       |
|          |            |                   | want to           |           |       |
|          |            |                   | start             |           |       |
|          |            |                   |                   |           |       |
|          |            |                   | campaign          |           |       |
| 3 ] Cour |            |                   | today?"           |           |       |
| 1        | Course     | Leave             | Error             | Error     | Pass  |
| *        | Name       |                   |                   |           | F 033 |
|          | Ivallie    | Course name field | message<br>should | message   |       |
|          |            | empty             |                   | displayed |       |
|          |            | empty             | appear            |           |       |
|          |            |                   | saying<br>"Course |           |       |
|          |            |                   |                   |           |       |
|          |            |                   | name field        |           |       |
|          |            |                   | cannot be         |           |       |
| 1        | Course     | Loove             | empty"            | Free      | Docs  |
| 2        | Course     | Leave             | Error             | Error     | Pass  |

|   | Description     | course<br>description<br>field<br>empty           | message should appear saying "Course description field cannot be empty"                              | message<br>displayed          |      |
|---|-----------------|---|--|-------------------------------|------|
| 3 | Course<br>Image | Leave<br>course<br>image field<br>empty           | Error message should appear saying "Course image field cannot be empty"                              | Error<br>message<br>diplayed  | Pass |
| 4 | Course category | Leave<br>course<br>category<br>field<br>unchanged | Alert message should appear saying "Are you sure you don't want to add any category to this course?" | Alert<br>message<br>displayed | Pass |
| 5 | Course Fee      | Leave<br>Course fee<br>field<br>unchanged         | Error message should appear saying "Course fee cannot  | Error<br>message<br>displayed | Pass |

|         |             |   | be \$0.00"   |                               |      |  |  |
|---------|-------------|---|--|-------------------------------|------|--|--|
| 4] Post |             |   |  |                               |      |  |  |
| 1       | Add Poll    | Click Add<br>poll button<br>without<br>entering<br>any data in<br>any field | Button<br>should be<br>disabled  | Button<br>disabled            | Pass |  |  |
| 2       | Poll type   | Click Poll<br>type<br>button  | Button<br>should be<br>disabled  | Button<br>disabled            | Pass |  |  |
| 3       | Poll Choice | Enter data<br>in Poll<br>section  | Error message should appear saying "Poll choice cannot be empty"                               | Error<br>message<br>displayed | Pass |  |  |
| 4       | Post Topic  | Leave post<br>topic field<br>unchanged                                      | Alert message should appear saying "Are you sure you want to proceed without selecting topic?" | Alert<br>message<br>displayed | Pass |  |  |
| 5       | Post Title  | Click Add<br>more<br>option and<br>select Post                              | Error<br>message<br>should<br>appear   | Error<br>message<br>displayed | Pass |  |  |

# SpurStartUp

| type as    | saying      |  |
|------------|-------------|--|
| Post and   | "Post title |  |
| then click | field       |  |
| Post       | cannot be   |  |
| button     | empty"      |  |

# **Chapter 4**

# **USER MANUAL**

### **4.1 User Manual**

User Manual is a technical communication document intended to give assistance to people using a particular system. It is usually written by a technical writer, although user guides are written by programmers, project managers, or other technical staff.

The system users are –

- 1) System Administrators
- 2) Subscribers
- 3) Premium Subscribers
- 4) Mentors

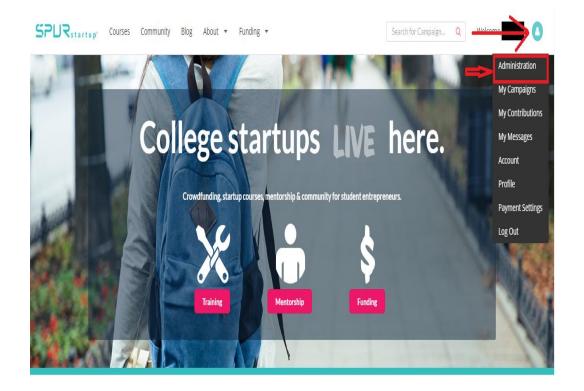
#### • View Reports :

As a system administrator admin can view various reports in admin dashboard.

Steps to visit report page are as follows:

- o Login in to the system using admin credentials.
- Click on the user menu tray in top right corner of the navigation bar.

Click on the first tab i.e. "Administration" to view
 Admin dashboard page.



#### • Visit contact us page

- Contact us is a facility provied by the system to users of the system to reach out to the SpurStartUp
   Team incase of any queries.
- To visit contact us click on the question mark floating bubble on screen.

 System will direct user to the contact us page after that.

# **Funding for a Cause**

10% of the funds raised by GSEA students will go to provide entrepreneurship education for low-income youth.

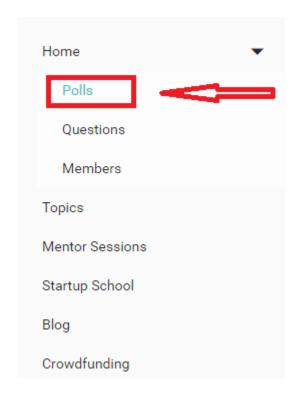




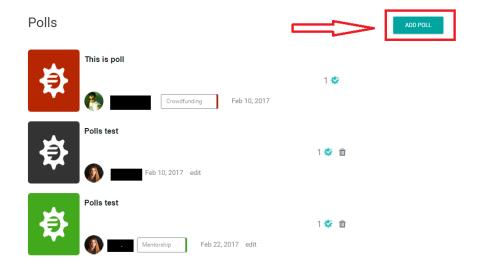


#### • Create Poll

- Subscribers can craete poll on business forum to which other users of the system can vote to.
- To create poll click on Poll Tab on the sidebar of the business forum



o Click on Add Poll button to create new poll.



### **4.2 Operations Manual**

Operations Manual guides the users of the system to perform the functions of the system.

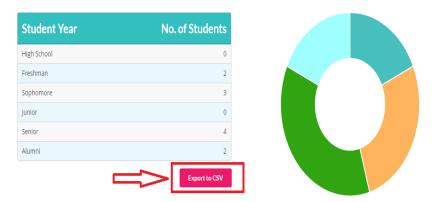
Operations Manual contains the detailed information of sequence of instructions to make use of certain function of the system.

SpurStartUp Operations Manual contains the essential information to make use of features made available to to the users.

#### • Export reports to csv file :

- o Visit admin dashboard page (refer User Manual)
- Select reports tab on dashboard.
- Navigate to the report whose data is to be exported to csv file.
- o Click on Export to CSV button below the report.
- Browser will download a csv file which can be found in your Downloads folder.

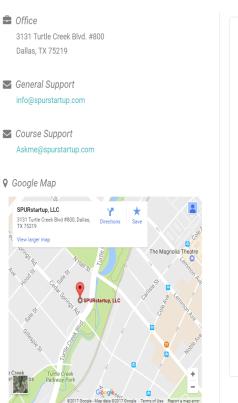
#### **Student Year Analysis**

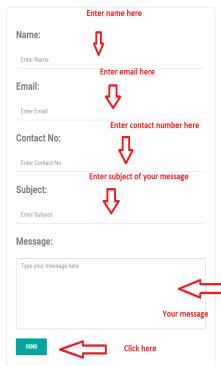


#### • Contact SpurStartUp Team:

- Navigate to contact us page of SpurStartUp ( refer
   User Manual ).
- o Enter name in name field
- o Enter your email in email field
- o Enter your contact number in contact field
- Enter your concern in short in subject field
- o Enter your concern in detail in message field
- Once all the fields are filled click on send button and SpurStartUp team will reach out to you within 48 hours.

#### Contact Us

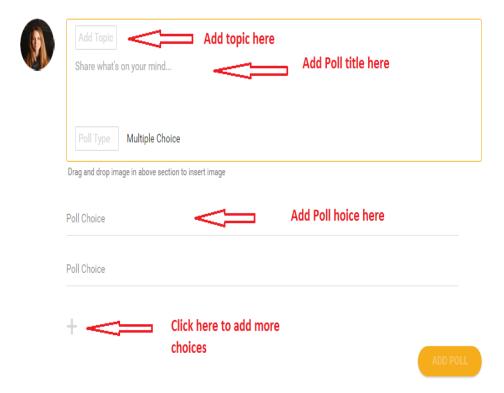




#### Create Poll

- Subscribers on the business forum have facility to create polls.
- To create a poll visit the create poll page ( refer User Manual ).
- Once on create poll page Enter poll title in title section.

- Enter poll choices in both poll choice fields. Note that a poll must have atleast 2 poll choices.
- More poll choices can be added by clicking on the plus symbol at the bottom.
- A topic can be linked to a poll if desired using add topic dropdown at top.
- Once all the fields are filled click on Add Poll button to create poll.



# **4.3 Programe Specification:**

Module: Poll

| Program name | Constraint         | Description         |
|--------------|--------------------|---------------------|
| Create Poll  | 1)The required     | To create a poll,   |
|              | fields must not be | subscriber is       |
|              | null.              | given a create poll |
|              | 2) Poll must have  | form.               |
|              | atleast 2 poll     |                     |
|              | choices.           |                     |

| Program name | Constraint         | Description         |
|--------------|--------------------|---------------------|
| Edit Poll    | The required       | To edit a poll,     |
|              | fields must not be | subscriber is       |
|              | null.              | given an edit poll  |
|              |                    | form.All the fields |
|              |                    | are filled with the |
|              |                    | data.               |

**Module : Campaign** 

| Program name    | Constraint         | Description    |
|-----------------|--------------------|----------------|
| Create Campaign | The required       | To create a    |
|                 | fields must not be | campaign,      |
|                 | null.Campaign      | subscriber is  |
|                 | start date must be | given a create |
|                 | a date in future.  | poll form.     |

# **Module : Reports**

| Program name | Constraint       | Description        |
|--------------|------------------|--------------------|
| Reports      | Admin must be    | To display         |
|              | logged in with   | various statistics |
|              | Google analytics | regarding          |
|              | account to view  | campaigns and      |
|              | all reports.     | users this program |
|              |                  | is used.           |

# **Module : Question**

| Program name    | Constraint       | Description      |
|-----------------|------------------|------------------|
| Answer Question | The question     | To add answer to |
|                 | must be approved | the question     |
|                 | by admin to      | subscriber is    |
|                 | answer it.       | given an add     |
|                 |                  | answer form.     |

# Module: Topic

| Program name | Constraint         | Description        |
|--------------|--------------------|--------------------|
| Add Topic    | The required       | To create a topic, |
|              | fields must not be | admin is given a   |
|              | null.Logged in     | add topic form.    |
|              | user must an       |                    |
|              | admin              |                    |

# **Drawbacks and Limitations:**

- The system is a web-based application, hence if the internet connectivity is not available system cannot be accessed.
- Visitors of the system cannot donate to a campaign without creating an account.

### **Proposed Enhancements**

The system satisfies all the requirements of the client however there are few proposed enhancements to the system. The additional functionalities that will be added to the system in future are:

- Add Course Assessment structure to the LMS through which mentors can assess the students of the course.
- Add sub-domains to the system i.e. users from diffrent groups have access to diffrent features.
- Add welcome tour to the website to guide the users who visit the website for the first time.
- Add ability to exports reports to other file formats such as pdf,.doc etc.

### **Conclusion**

The proposed system titled "SpurStartUp" would be a collection of all three components of the system i.e. Crowdfunding, LMS, Business forum which will help the educational organizations build more and more young entrepreneurs. All the requirements stated by the Client Company have been addressed in this software. The entireUser Interfaces in the software is easy to use and simple to understand. Any user can easily create a campaign to get funding for his venture. Also users can enroll for various courses offerred by SpurStartUp team. A platform like Business Forum is made available to users by this system that helps users to stay in touch with the business management domain. It makes the system more interesting to work.

The software allowed me to learn new technologies like

- 1. Php 5.6
- 2. Wordpress rapid developement framework
- 2. Eclipse Neon Edition IDE
- 3. AngularJS 1.0

- 4. Javascript
- 5. HTML5
- 6. CSS3
- 7. jQuery
- 8. Bootsrap framework

It allowed me to build user interface more dynamic. It gives me tremendous confidence to work in Software company. It teaches me to work in a team and gives me new ideas.

### **Bibliography**

#### **Books**

- AngularJS by Shyam Seshadri ,O'Reilly Media
- Learning AngularJS by Ken Williamson , O'Reilly Media
- Functional Javascript by Michael Fogus , O'Reilly
   Media

### **Sites**

- <a href="https://www.w3schools.com/angular/">https://www.w3schools.com/angular/</a>
- <a href="https://angularjs.org/">https://angularjs.org/</a>
- https://www.w3schools.com/bootstrap/
- <a href="https://www.w3schools.com/js/">https://www.w3schools.com/js/</a>
- <a href="http://php.net/manual/en/index.php">http://php.net/manual/en/index.php</a>
- <a href="https://codex.wordpress.org/">https://codex.wordpress.org/</a>
- <a href="https://www.tutorialspoint.com/jquery/">https://www.tutorialspoint.com/jquery/</a>

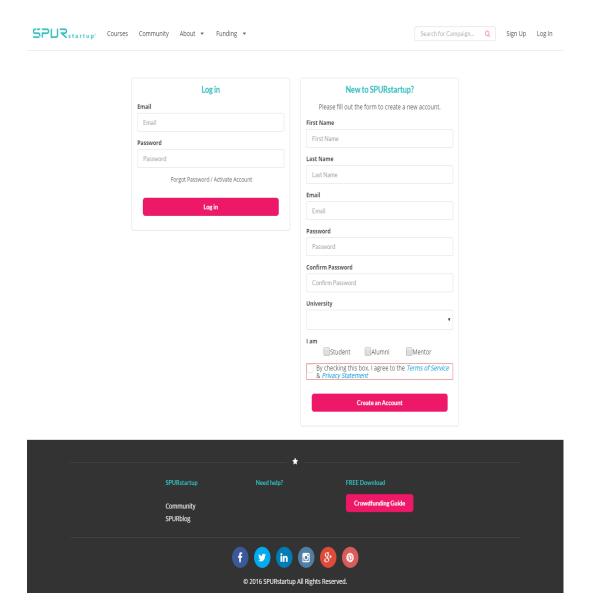
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|--------------|----|------|-----|-----|-----|
|              | ทบ | ı٣٧  | tar | ¹†I | In  |
| J            | μu | ט נו | tai | U   | ץ י |

# **ANNEXURES**

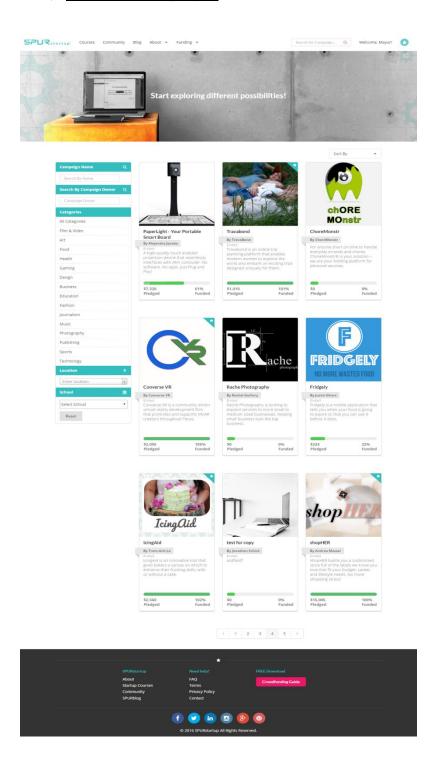
### **Annexure 1**

# **User Inteface Screens**

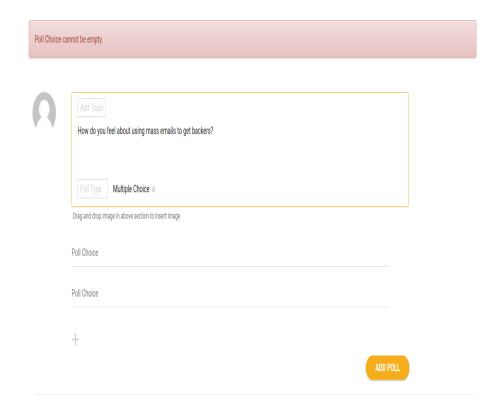
### 1) Login Screen



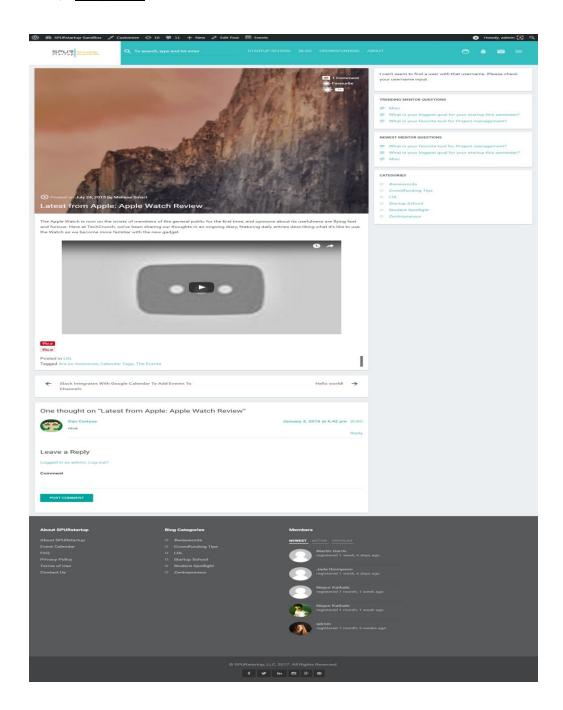
### 2) View All Campaigns



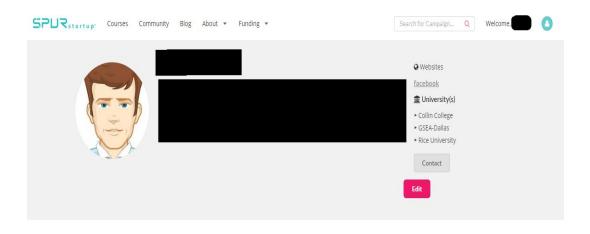
### 3) Validation



# 4) Blog Post



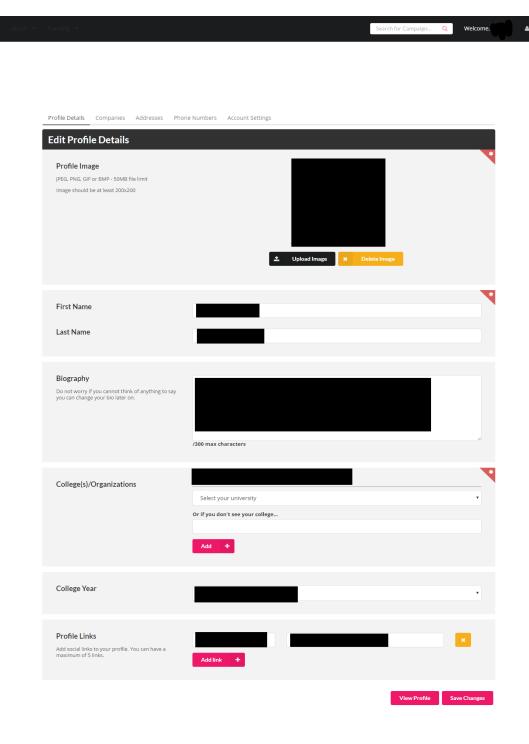
### 5) Profile







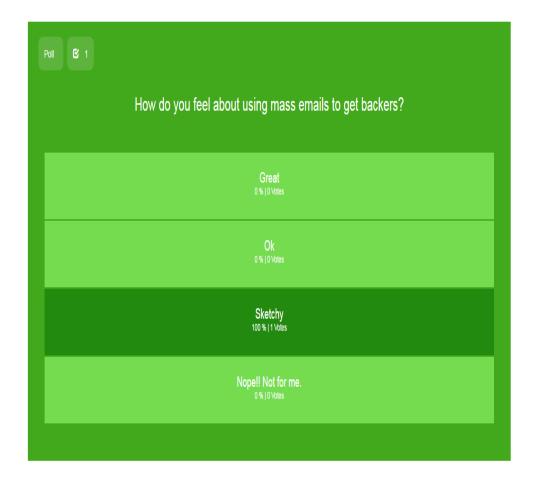
### 6) Edit Profile



# 7) <u>View Polls</u>



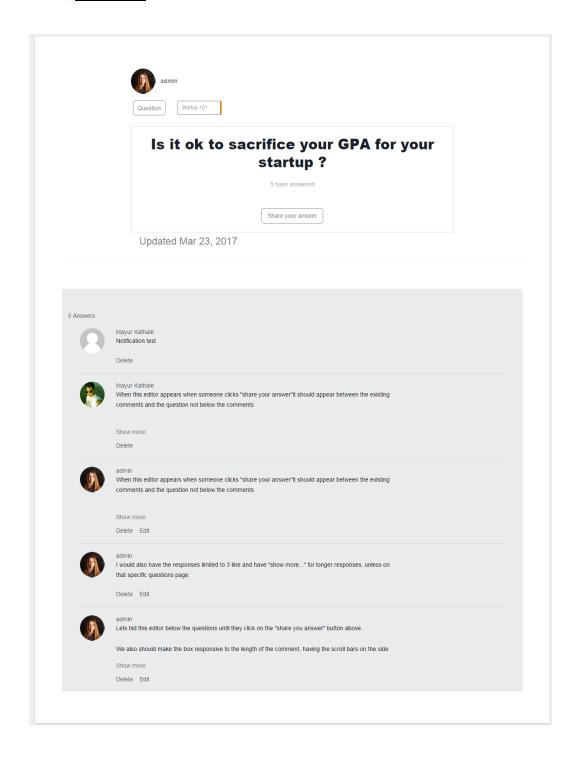
# 8) <u>Poll</u>



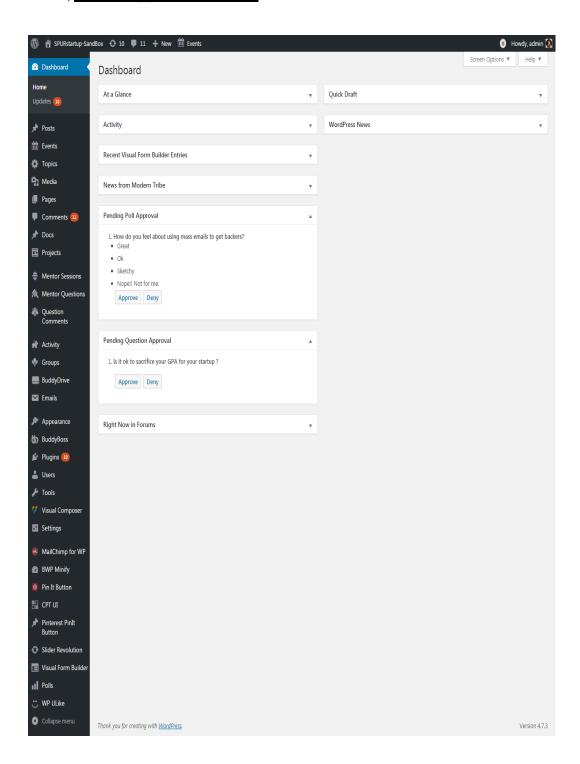
# 9) <u>View Questions</u>



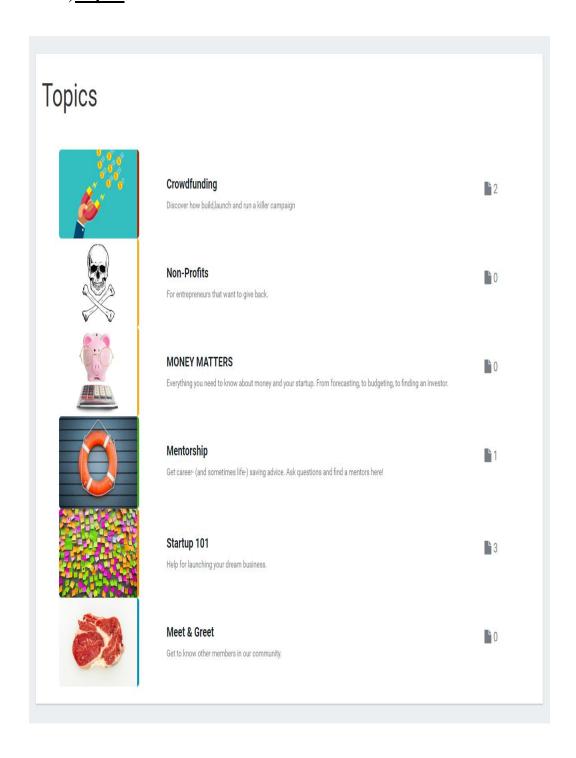
# 10) Question



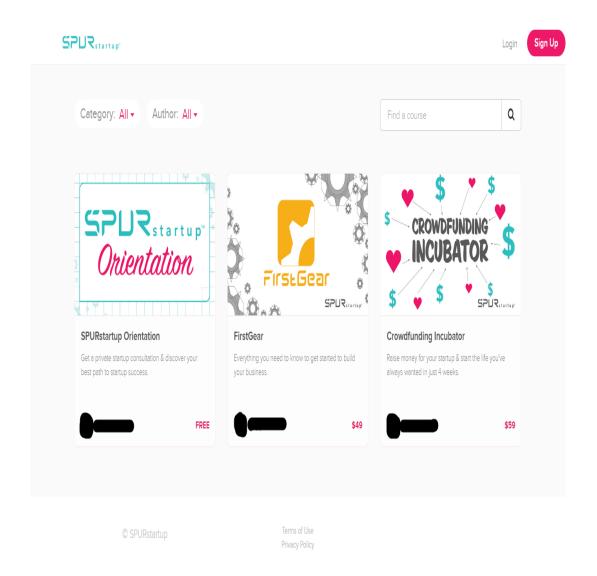
#### 11) Admin approval for Post



# $12)\underline{Topics}$



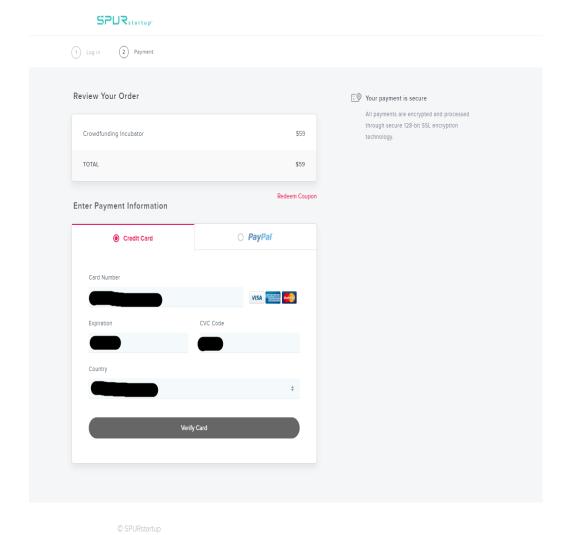
### 13) View Courses



# 14) Course Content



# 15) Enroll for Coruse

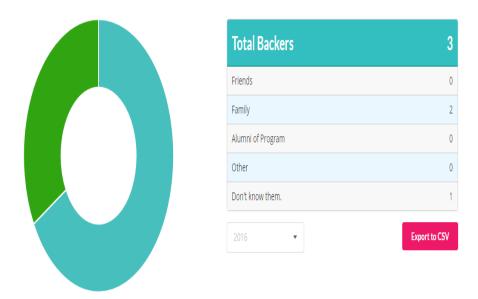


# **Annexure 2**

# **Output Screens**

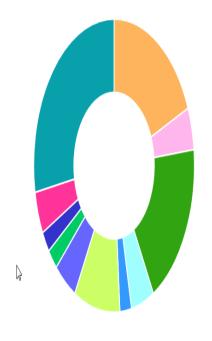
# 1) Pledger Relation

# **Backer Relation Reports**



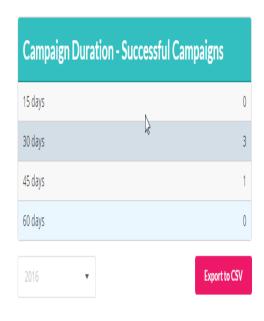
# 2) Capaign Category Report





# 3) Campaign Duration Report

# **Campaign Duration Reports**





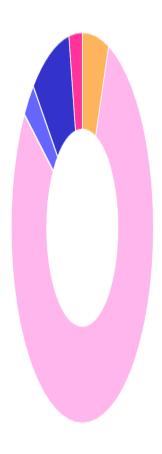
# 4) Campaign Overview





# Campaign Report

| Total Campaigns   |    |                    | 38 |
|-------------------|----|--------------------|----|
| Being Edited      | 26 | Running            | 0  |
| Not Approved      | 1  | Paused             | 0  |
| Sent For Review   | 0  | Being Reviewed     | 0  |
| Cancelled         | 2  | Not Funded         | 0  |
| Pre Authorizing   | 0  | Processing Capture | 0  |
| Capture Accepted  | 0  | Capture Declined   | 1  |
| Capture Completed | 3  |                    |    |



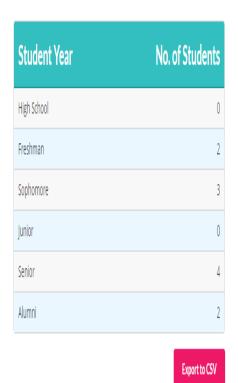
### 5) Pledge Analysis Report

# Pledge Amount Analysis



# 6) Student Year Report

# Student Year Analysis

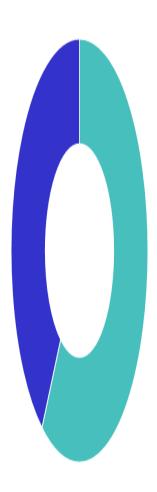




# 7) <u>Campaign Report Term wise</u>

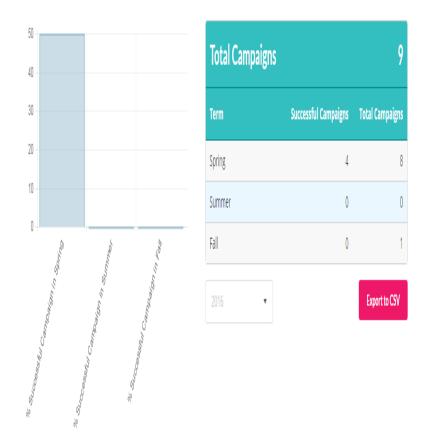






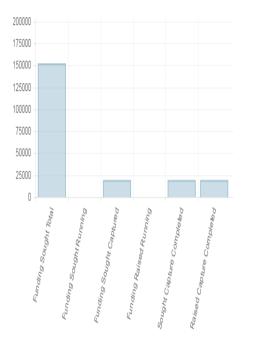
# 8) <u>Campaign Success Rate</u>

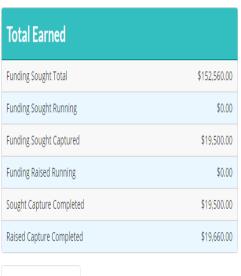




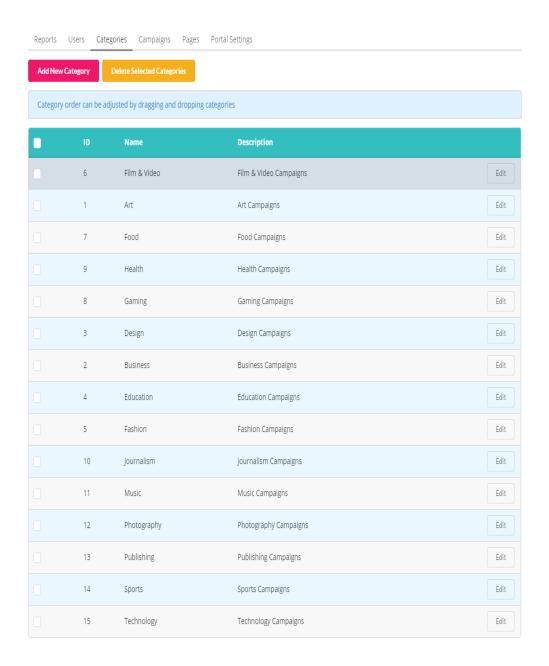
### 9) Funding Report

# **Funding Report**

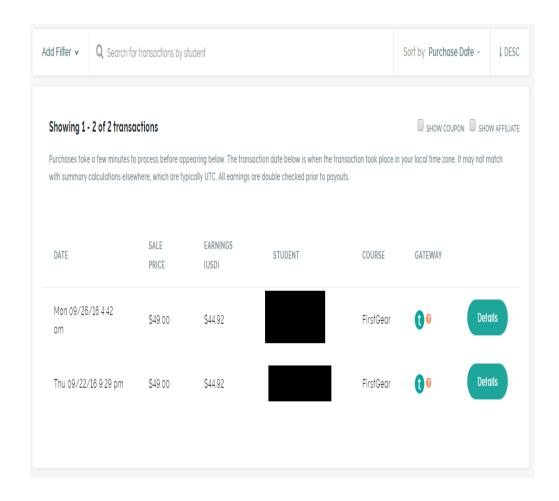




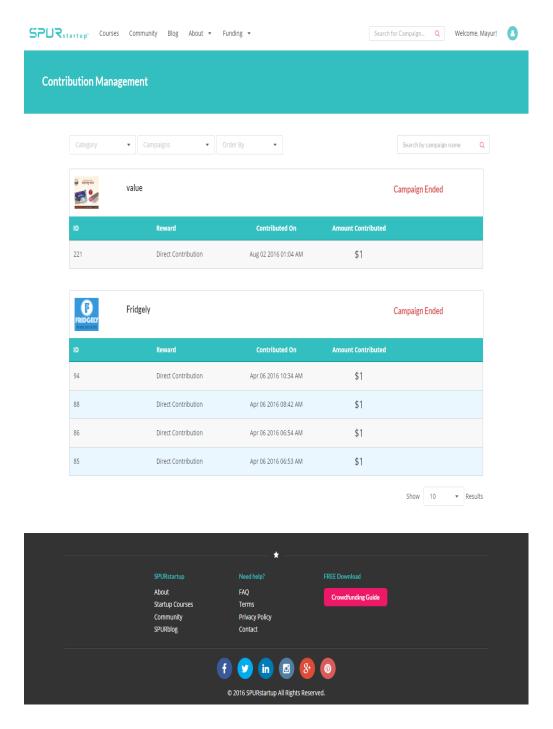
### 10) Campaign Category Table



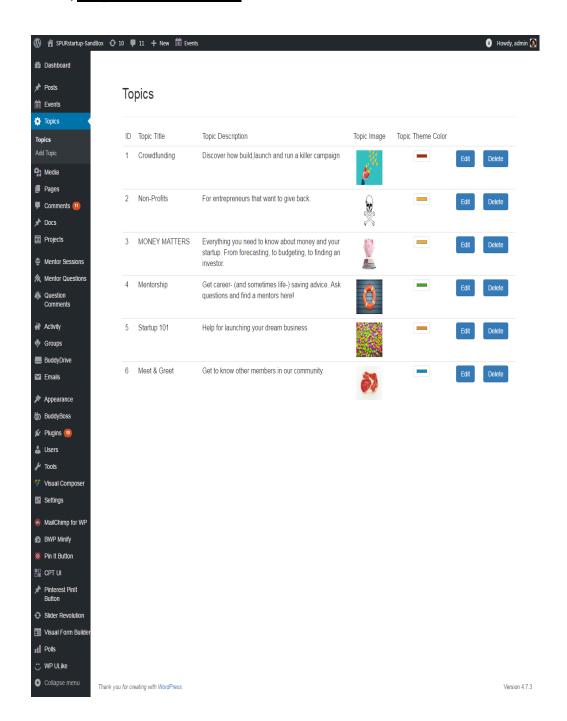
## 11) View Course Transactions ( Admin )



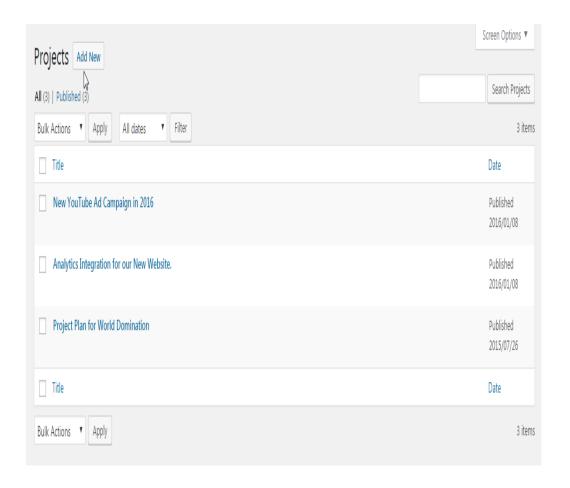
### 12) My Donations



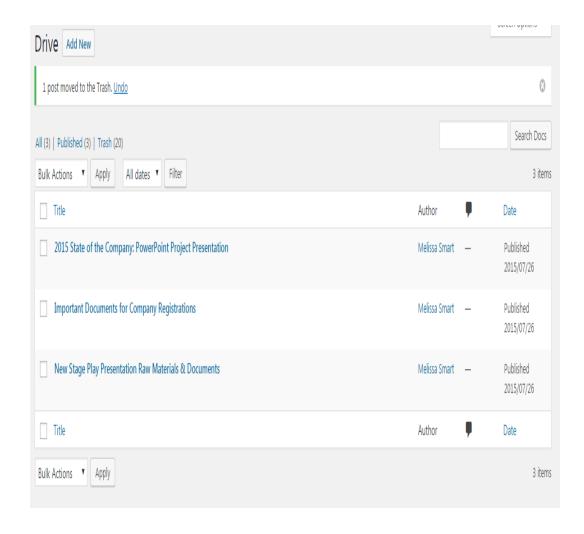
#### 13) Topic View ( Admin )



# 14) Project View ( Admin )



# 15) Drive View ( Admin )



### Annexure 3

## **Sample Program**

```
<?php
/**
* Php script containing all functions of wp_spur_topic table
* @package thrive
*/
/* Initialize global Table column keys for wp_spur_topic */
$table_name = "wp_spur_topic";
$topic_id_key = "ID";
$topic_title_key = "topic_title";
$topic_description_key = "topic_description";
$topic_image_key = "topic_image";
$topic_theme_color_key = "topic_theme_color";
/**
* Adds topic in wp_spur_topic
* @param array $topic_args {
                Array arguement for Adding a topic
                                          topic_id of the topic
                 @type int
                                 ID
                 @type string topic_title Title of the topic
                 @type string topic_description Description of
the topic
                 @type string topic_image image path of the
topic to be added
                 @type string topic_theme_color Hex value of
the topic theme color
* @return int|false The new topic's ID of success, false on
failure
*/
function add_spur_topic($topic_args) {
        global $wpdb;
        global $table_name;
```

```
global $topic_id_key;
        global $topic_title_key;
        global $topic_description_key;
        global $topic_image_key;
        global $topic_theme_color_key;
        if( is_array($topic_args) ) {
                 // Set default values for the $args array
                 topic_id = 0;
                 $topic_title = "";
                 $topic_description = "";
                 $topic_image = "";
                 $topic_theme_color = "#333";
                 // Exract values from the $topic_args array
                       (array_key_exists (
                                                 $topic_id_key,
$topic_args ))
                         $topic_id
                                                     $topic_args
[$topic_id_key];
                 if
                      (array_key_exists
                                               $topic_title_key,
$topic_args ))
                         $topic_title
                                                     $topic_args
[$topic_title_key];
                 if (array_key_exists ( $topic_description_key,
$topic_args ))
                         $topic_description
                                                     $topic_args
[$topic_description_key];
                     (array_key_exists (
                 if
                                             $topic_image_key,
$topic_args ))
                         $topic_image
                                                     $topic_args
[$topic_image_key];
                 if (array_key_exists ( $topic_theme_color_key,
$topic_args ))
```

```
$topic_theme_color =
                                                    $topic_args
[$topic_theme_color_key];
                // Check the input values for empty condition
                if( empty($topic_title) )
                         return false:
                // Add new topic if $topic_id is 0 else update the
existing topic
                if($topic_id > 0) {
                         table_data = array(
                                          $topic_title_key =>
$topic_title,
        $topic_description_key => $topic_description,
        $topic_theme_color_key => $topic_theme_color
                         if($topic_image)
        $table_data[$topic_image_key] = $topic_image;
                         return $wpdb->update($table_name ,
$table_data , array($topic_id_key => $topic_id));
                 } else {
                         // Check if topic title already exists
                         if(
                                      !empty(
                                                        $wpdb-
>get_results("Select topic_title from wp_spur_topic where
topic_title="".$topic_title.""") ) )
                                  return false;
                         $table_data = array(
                                          $topic_id_key
                                                            =>
$topic_id,
                                          $topic_title_key =>
$topic_title,
```

```
$topic_description_key => $topic_description,
                                           $topic_image_key =>
$topic_image,
        $topic_theme_color_key => $topic_theme_color
                          );
                          $data_type = array(
                                           '%d',
                                           '%s'.
                                           '%s',
                                           '%s',
                                           '%s',
                          );
                          $wpdb->insert($table_name
$table_data , $data_type );
                          $id = $wpdb->insert_id;
                          if($id > 0)
                                  return $id;
                          return false:
                 }
        } else {
                 // Input is not an array return error
                 return false;
        }
/**
* Updates topic in wp_spur_topic
* @param array $topic_args {
                 Array arguement for Adding a topic
                                           topic_id of the topic
                 @type int
                                  ID
                 @type string topic_title Title of the topic
                 @type string topic_description Description of
the topic
```

```
@type string topic_image image path of the
topic to be added
                 @type string topic_theme_color Hex value of
the topic theme color
* @return int|false The new topic's ID of success, false on
failure
*/
function edit_spur_topic($topic_args) {
        add_spur_topic($topic_args);
}
/**
* Deletes topic from the wp_spur_topic
* @param int $topic id Id if the topic to be deleted
* @return boolean true if topic is deleted, false if failed
function delete_spur_topic($topic_id) {
        global $wpdb;
        global $table_name;
        global $topic_id_key;
        if($topic_id > 0) {
                 $deleted
                           =
                                $wpdb->delete($table_name
array( $topic_id_key => $topic_id ) , array('%d'));
                 if($deleted)
                          return true;
                 else
                         return false:
        }
        return false;
* Gets a topic information by its id
* @param int $topic_id ID of the topic to be retrieved
* @return object|false Associative array of topic informantion if
success, false if failure
*/
function get_spur_topic_by_id($topic_id) {
```

```
global $wpdb;
        global $table_name;
        global $topic_id_key;
        if($topic_id > 0) {
                 $topic = $wpdb->get_row("Select * from
".$table_name." where ".$topic_id_key."=".$topic_id);
                if( !empty($topic))
                         return $topic;
                 else
                         return false:
        } else {
                 return false;
        }
}
/**
* Gets all topics
* @return object|NULL array of topic objects
function get_all_spur_topics() {
        global $wpdb;
        global $table_name;
                       $wpdb->get_results("Select
        $result =
                                                          from
wp_spur_topic", OBJECT_K);
        return $result;
}
* Adds topics to post
* @param int $post_id id of the post
* @param array $topic_id array of id of topics
* @return array|false array of topic ids if success, false on
failure
*/
function add_post_topic($post_id , $topic_id) {
        // Check if $post_id is not an array and valid post_id
and $topic_id is an array
```

```
if(!is_array($post_id)
                                 &&
                                        post_id > 0
                                                            &&
is_array($topic_id)) {
                 $topic_array = array();
                 // Check if topic is has valid elements
                 foreach( $topic_id as $id )
                         if( id <= 0 )
                                  // Invalid input
                                  return false;
                 foreach( $topic_id as $id ) {
                          $result =
                                       add_post_meta($post_id,
'post_topic', $id);
                         if($result)
                                  array_push($topic_array
$result);
                          else
                                  return false;
                 return $topic_array;
        } else {
                 // Invalid input to function
                 return false;
        }
}
```