Project Report

On

Online College Stationary Portal

For

ROH Techno Services

By

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CHAPTER 1

INTRODUCTION

1.1 Company Profile

Company Name: ROH Techno Services

Year of establishment: 2016

Address: Office No 3, Gitanjali Hights, Sr.No 250/251,

Near Kothrud Bus Stand, Kothrud, Pune 38

Contact Number: +9168631502/03/04,020-25385004

Mobile Numbers: 9168631502, 9168631503, 9168631504

Website: www.rohtechnoservices.co.in

Mail-ID: director@rohtechnoservices.co.in,

rohtechnoservices@gmail.com

Co-Founders:

Mrs. Kavita Kaushik Nimbhorkar

Mrs. Aparna Ashok Kadam

Mrs. Nivedita Bhandare-Yadav

ROH Techno Services is a software development firm and training centre registered under partnership deed act 58 is formed in 2016 in the premises of 1200 square foot place with all needed facilities to provide services like developing software (java based, Android requirement based and Web based) and providing trainings in computer software and hardware networking to the students from technical & non-technical backgrounds. ROH Techno Services are extremely motivated to constantly develop the skill of their students and make them grow professionally. The Trainers of ROH Techno Services are all globally certified and having more than 10 + years of experience in their respective technologies. Company has trained more than 200 students till date.

ROH Techno Services is a training and development firm focused on transforming how people think about and experience a product, activity, company or place. The firm provides following facilities:

Development:

Android Mobile Development

The firm has best experienced Android development team at ROH Techno Services, who will research well your business & organization and see all requirements to develop an application and helping business process to reach the goal.

They create your mobile applications more understandable that gives a best impact on your business and success on a volatile marketplace.

Application Development

ROH Techno Services believes that task is not complete until their customer is happy and doubt free. So even after delivery they provide all support to our clients

regarding content change and stay strong by their side until they are fully satisfied with our job.

Web Design:

ROH Techno Services has a skilled professional team which is involved in development of any type or size website you require, from small custom designed websites or highly advanced online stores.

Internship:

At ROH, the firm provides industrial training / Internship to MCA, BE/BTech IT and CS Students. The firm specialize in Mobile technologies and Web technologies.

1.2 Existing System and Need for System

Previous system is manual. To maintain all the necessary records of required stationary and used stationary is bit complicated.

- Inability of modification of data: The managing of huge data in a stationary effectively and efficiently for efficient results, storing the details of the consumers etc. in such a way that the database can be modified which is not possible in the current system.
- 2. Not user friendly: In a stationary the existing system is not user friendly because the retrieval and storing of data is slow and data is not maintained efficiently
- Difficulty in reports generating: Report generating in stationary either no reports generating in a current system or they are generated with great difficulty reports take time to generate in the current system.
- Manual operator control: Manual operator control is there and lead to a lot of chaos and errors.

- 5. Lot of paperwork: In an existing stationary system requires lot of paper work and even a small transaction require many papers fill. Moreover any unnatural cause (such as fire in the organization) can destroy all data of the organization. Loss of even a single paper led to difficult situation because all the papers are interrelated.
- 6. Inability of sharing the data: In a stationary the data cannot be shared in the existing system. This means that no two persons can use the same data in existing system. Also the two departments in an organization cannot interact with each other without the actual movement of data.
- No support in decision-making: Existing system of stationary does not support managerial decision-making.
- 8. No support in strategic competitive advantage: Existing system of stationary do not support strategic competitive advantages.
- To solve this problem, we have come out with an ideal Online College Stationary Portal.

1.3 Scope of Work

- 1. Create distinct users based on their roles and permissions.
- 2. Authenticate users at their login.
- 3. The system provides assurance of proper accuracy and effectiveness thereby improving the related services.
- This system provides better management by providing desired flexibility, fast response, ability to support changes and ability to maintain quality services.
- 5. This system will have stronger controls like passwords and various levels of user access options will be added.
- 6. We are going to develop the proposed system with an objective to eliminate the running cost by overcoming the continuous stationery expenses, manual storage need, and extra staff in the information resources department of the organization.
- 7. We have tried to develop this system keeping in mind the user of the system. So there is not much need for a trained professional to use this system.

- We have made a very user friendly interface so that it can be easy to access.
- 9. Provide database security to store the data related to the proposed project.
- 10. Provide the information about available stationary products.
- 11. Facility to allocate the available stationary products to users from respective departments of a college.
- 12. Facility to order new stationery products that are unavailable or finished.
- 13. Providing interface to view stock details of the available stationary products in the stock.
- 14. Mechanism to reset the password in case the user forgets it.
- 15. Facility to generate reports for all the modules of the proposed project.

1.4 Operating Environment – Hardware and

Software

Hardware Specification

Processor	: Intel Dual based System				
Processor Speed	: 1GHz	to	2GHz		
RAM	: 512MB	to	1GB		
Hard Disk	: Requires space of min.10GB				
Keyboard	: 104 keys				
Software Specification					
IDE & Language	: Visual Studio 2019 –ASP.NET				
	Framework Using C#				
Database	: SQL Server				
Operating System	: Windows 7/8/8.1/10				

1.5 Detail Description of technology used

WHY FRONT END - ASP.NET?

1: ASP.NET Is integrated with the .NET Framework

The .NET Framework is divided into an almost painstaking collection of functional parts, with a staggering total of more than 10,000 types (the .NET term for classes, structures, interfaces, and other core programming ingredients). The massive collection of functionality that the .NET Framework provides is organized in a way that traditional Windows programmers will see as a happy improvement. Each one of the thousands of classes in the .NET Framework is grouped into a logical, hierarchical container called a namespace.

Different namespaces provide different features. Taken together, the NET namespaces offer functionality for nearly every aspect of distributed development from message queuing to security. This massive toolkit is called the class library.

2: ASP.NET Is Compiled, Not Interpreted

One of the major reasons for performance degradation in classic ASP pages is its use of interpreted script code. Every time an ASP page is executed, a scripting host on the web server needs to interpret the script code and translate it to lower-level machine code, line by line. ASP.NET applications are always compiled in fact, it's impossible to execute C# or Visual Basic code without it being compiled first.

3: ASP.NET Is Multilanguage

IL is a stepping stone for every managed application. (A managed application is any application that's written for .NET and executes instream_ide the managed environment of the CLR.) In a sense, IL is the language of .NET, and it's the only language that the CLR recognizes.

4: ASP.NET Is Hosted by the Common Language Runtime

The most important aspect of the ASP.NET engine is that it runs instream ide the runtime environment of the CLR.

Its benefits are as under: -

A: Automatic memory management and garbage collection:

Every time your application instantiates a reference-type object, the CLR allocates space on the managed heap for that object. However, you never need to clear this memory manually. The garbage collector runs periodically instream_ide the CLR, automatically reclaiming unused memory for inaccessible objects. This model saves you from the low-level complexities of C++ memory handling and from the quirkiness of COM reference counting.

B: Type safety:

When you compile an application, .NET adds information to your assembly that indicates details such as the available classes, their members, their data types, and so on. As a result, other applications can use them without requiring additional support files, and the compiler can verify that every call is valid at runtime. This extra layer of safety completely obliterates whole categories of low-level errors.

C: Extensible metadata:

The information about classes and members is only one of the types of metadata that .NET stores in a compiled assembly. Metadata describes your code and allows you to provide additional information to the runtime or other services. For example, this metadata might tell a debugger how to trace your code, or it might tell Visual Studio how to display a custom control at design time. You could also use metadata to enable other runtime services, such as transactions or object pooling.

D: Structured error handling:

NET languages offer structured exception handling, which allows you to organize your error-handling code logically and concisely. You can create separate blocks to deal with different types of errors. You can also nest exception handlers multiple layers deep.

E: Multithreading:

The CLR provides a pool of threads that various classes can use. For example, we can call methods, read files, or communicate with web services asynchronously, without needing to explicitly create new threads.

5: ASP.NET Is Object-Oriented:

ASP provides a relatively feeble object model. It provides a small set of objects; these objects are really just a thin layer over the raw details of HTTP and HTML. On the other hand, ASP.NET is truly object-oriented. Not only does your code have full access to all objects in the .NET Framework, but you can also exploit all the conventions of an OOP (object-oriented programming) environment. For example, you can create reusable classes, standardize code with interfaces, extend existing classes with inheritance, and bundle useful functionality in a distributable, compiled component.

6: ASP.NET Is Multiservice and Multibrowser:

One of the greatest challenges web developers face is the wholesaler_Ide variety of browsers they need to support. Different browsers, versions, and configurations differ in their support of HTML. Web developers need to choose whether they should render their content according to HTML 3.2, HTML 4.0, or

something else entirely—such as XHTML 1.0 or even WML (Wireless Mark-up Language) for mobile devices. This problem, fuelled by the various browser companies, has plagued developers since the World Wholesaler_Ide Web Consortium (W3C) proposed the first version of HTML. Life gets even more complicated if you want to use an HTML extension such as JavaScript to create a more dynamic page or provide validation.

7: ASP.NET Is Easy to Deploy and Configure:

Every installation of the .NET Framework provides the same core classes. As a result, deploying an ASP.NET application is relatively simple. Distributing the components your application uses is just as easy. All you need to do is copy the component assemblies along with your website files when you deploy your web application. Because all the information about your component is stored directly in the assembly file metadata, there's no need to launch a registration program or modify the Windows registry. Configuration is another challenge with application information such as user accounts and user privileges. ASP.NET makes this deployment process easier by minimizing the dependence on settings in IIS (Internet Information Services). Instead, most ASP.NET settings are stored in a dedicated web.config file. The web.config file is placed in the same directory as your web pages. It contains a hierarchical grouping of application settings stored in an easily readable XML format that you can edit using nothing more than a text editor such as Notepad.

BACK END – A DESCRIPTION

The back-end comprises the components that process the output from the front-end. Back-end is hidden from the user.

A back-end database is a database that is accessed by users indirectly through an external application rather than by application programming stored within the database itself or by low level manipulation of the data (e.g. through SQL commands).

A back-end database stores data but does not include end-user application elements such as stored queries, forms, macros or reports. SQL SERVER: -

SQL Server is an SQL-compliant RDBMS. SQL-compliant means it uses the ANSI (American National Standard Institute) version of Structured Query Language or 'SQL'. Structured Query Language is a command that allow us to modify or retrieve information from the database.

Client server means that SQL Server is designed to store data in the central location (the server) and deliver it on demand to numerous other locations (the client). SQL Server is also a Relational Database Management System (RDBMS).

CHAPTER 2

PROPOSED SYSTEM

2.1 Proposed System

The proposed system provides user friendly interface and also provides powerful and efficient database management system. The aim of proposed system is to develop a system of improved facilities. The existing system work is done manually thus hampering its accuracy and effectiveness. The proposed system can overcome the limitations of the existing system.

The system provides proper security and reduces the manual work. The existing system has several disadvantages and many more difficulties to work. The proposed system tries to eliminate or reduce these difficulties up to some extent.

The proposed system will help the user to reduce the workload and mental conflict. Through this system it is possible to print various reports for the organization. The aim of the proposed system is to develop a system of improved facilities.

Admin can generate requirements of product.

Admin can allocate product to H.O.D. and H.O.D. can allocate product to the staff.

2.2 Objectives of System

- To provide a software application for the stationery department of the college.
- 2. To bring in an easy user interface and interactive application which provides feasible options to everyone associated with the application directly and indirectly.
- 3. To track the stationery stock and the bills that has been generated previously.
- 4. To keep data in a properly organized way and provide greater efficiency to the users of this application.
- To reduce clerical work as most of the things will be accomplished automatically with the help of application software.
- 6. To minimize time for processing of various tasks thereby reducing time consumption. As the application stores sensitive information, we have provided security features for the access authorization processes.

 This application helps the prevention of paper wastage as most of the things are to be stored in the system thereby making eco-friendly.

2.3 User Requirements

Module wise requirements: -

- <u>Manage User Type</u>: This module is for the requirement from user that creates type of user like Staff/Administrator.
- <u>Manage User</u>: This module is for the requirement from user that creates and manage user's details.
- <u>MANAGE DEPARTMENT DETAILS</u>: This module is for the requirement from user that creates and manage department details.
- <u>MANAGE STREAM DETAILS</u>: This module is for the requirement from user that creates and manage stream details.
- <u>MANAGE WHOLESALER DETAILS</u>: This module is for the requirement from user that creates and manage wholesaler details.
- <u>MANAGE PRODUCT DETAILS</u>: This module is for the requirement from user that creates and manage product details.

- <u>STOCK IN MAINTENANCE</u>: This module is for the requirement from user that creates and manage stock details.
- <u>ALLOCATE PRODUCT</u>: This module is for the requirement from user that creates and manage product allocation details.
- <u>MANAGE PRODUCT Requirement DETAILS</u>: This module is for the requirement from user that creates and manage product requirement details.
- <u>Order Details</u>: This module is for the requirement from user that creates and manage product order details.
- <u>Order Bill details</u>: This module is for the requirement from user that creates and manage order bill details.
- <u>Reports</u>: In this module user requires all the reports.

CHAPTER 3

ANALYSIS & DESIGN

3.1: Object Diagram



Object Diagram

3.2: Class Diagram



Class Diagram

3.3: Use case Diagrams

1) Overall Use case Diagram



2) Admin based Use case Diagram


3) HOD based Use case Diagram

USECASE DIAGRAM(HOD)



4) Staff based Use case Diagram



USECASE DIAGRAM(Staff)

3.4: Activity Diagrams

1) Admin based Activity Diagram



2) HOD based Activity Diagram



3) Staff based Activity Diagram



3.6: Sequence Diagram:

Admin based Sequence Diagram



HOD based Sequence Diagram



Staff based Sequence Diagram



3.6: Entity Relationship Diagram



3.7: Module Hierarchy Diagram



3.8: Component Diagram



3.9: Deployment Diagram



3.10 Module Specifications

1) Module Name: Manage User

Purpose:

This module is to manage the user details of this system. Basically, this module will store information of user as well as his/her login credentials i.e. username and password. This module will help us to identify the role of user in the system i.e. user can be administrator, HOD or staff. This module will also help to store details about the security question and its answer which will help user if he/she forgets the login credentials or want reset the existing password.

Input:

Full Name Address Phone number Department User Type Username Security Question Answer

Search User

Output:

User details are stored and acknowledgement is given .Also, the details are then displayed in tabular format. The input keyword in search box is searched instream_ide the database and related information is only displayed in tabular format.

2) Module Name: Manage User Type

Purpose:

This module is to manage the user type details of this system. Basically, this module will store information of the user category i.e. type of user using this system. Therefore, for present scenario required user types for the existing system are administrator, HOD and staff. Furthermore, if in future enhancement of this system, if it requires a new user type category, it will be managed by this module.

<u>Input:</u>

User Type

Search User Type

Output:

User type details are stored and acknowledgement is given .Also, the details are then displayed in tabular format. The input keyword in search box is searched instream_ide the database and related information is only displayed in tabular format.

3) Module Name: Manage Stream

Purpose:

This module is to manage the stream details of this system. Basically, this module will store information of the stream i.e. name of the stream in college stored in this system. As this module is use for storing stream names, stream can be any such as Science, Commerce, Arts, etc. which directly are related with the use of any stationary material received by the college.

Input:

Stream Search Stream

Output:

Stream details are stored and acknowledgement is given .Also, the details are then displayed in tabular format. The input keyword in search box is searched instream_ide the database and related information is only displayed in tabular format.

4) Module Name: Manage Department

Purpose:

This module is to manage the department details of this system. Basically, this module will store information of the department i.e. name of the department in college stored in this system. As this module is use for storing department names, department names are stored with the respective stream which can be any such as Science, Commerce, Arts, etc. which directly are related with the use of any stationary material received by the college.

Input:

Department

Stream

Search Department

Output:

Department details are stored and acknowledgement is given .Also, the details are then displayed in tabular format. The input keyword in search box is searched instream_ide the database and related information is only displayed in tabular format.

5) Module Name: Manage Product

Purpose:

This module is to manage the product details of this system. Basically, this module will store information of the product i.e. name of the product which are used in college stationary. As this module is use for storing product details, product names are stored with their respective brand names.

Input:

- Product Brand
- Search Product

Output:

Product details are stored and acknowledgement is given .Also, the details are then displayed in tabular format. The input keyword in search box is searched instream_ide the database and related information is only displayed in tabular format.

6) Module Name: Manage Wholesaler

Purpose:

This module is to manage the wholesaler details of this system. Basically, this module will store information of the wholesaler i.e. name of the wholesaler which are appointed by college. As this module is use for storing wholesaler details, wholesaler names are stored with their respective address, phone number, alternate number and e-mail id.

Input:

Full Name Address Phone number Email ID Alt number Search wholesaler

Output:

Wholesaler details are stored and acknowledgement is given .Also, the details are then displayed in tabular format. The input keyword in search box is searched instream_ide the database and related information is only displayed in tabular format.

7) Module Name: Stock in Maintenance

Purpose:

This module is to manage the product stock details of this system. Basically, this module will store information of the stock i.e. stock of the stationary product in maintenance which are used in college stationary. As this module is use for storing stationary product stock details, stock is stored with respect to wholesaler, price, quantity and date.

Input:

Wholesaler Product Price Date Quantity Search Stock in Maintenance

Output:

Stock in maintenance details are stored and acknowledgement is given .Also, the details are then displayed in tabular format. The input keyword in search box is searched instream_ide the database and related information is only displayed in tabular format.

8) Module Name: Manage Requirement

Purpose:

This module is to manage the product requirement details of this system. Basically, this module will store information of the requirements i.e. name of the product, its required quantity and user type which are required in college. As this module is use for storing requirement details, each requirement is stored with its unique id stored in the database.

Input:

Product

Quantity

By Search Requirement

Output:

Requirement details are stored and acknowledgement is given .Also, the details are then displayed in tabular format. The input keyword in search box is searched instream_ide the database and related information is only displayed in tabular format.

9) Module Name: Manage Product Allocation

Purpose:

This module is to manage the product allocation details of this system. Basically, this module will store information of the allocation of each and every product. The staff name who gets product allocated, product name and quantity of product to be allocated and the in stock quantity details are stored in the tabular format.

Input:

Staff Name

Product

Quantity In Stock Quantity Search Product Allocation

Output:

Product allocation details are stored and acknowledgement is given .Also, the details are then displayed in tabular format. The input keyword in search box is searched instream_ide the database and related information is only displayed in tabular format.

10) Module Name: Manage Order

Purpose:

This module is to manage the order details of this system. Basically, this module will store information of the order of each and every product. The user who will place an order, name of wholesaler on whom order will be placed, order generation date and order status are the details which are stored in the tabular format.

Input:

Order by Wholesaler Order date Search Order

Output:

Order details are stored and acknowledgement is given .Also, the details are then displayed in tabular format. The input keyword in search box is searched instream_ide the database and related information is only displayed in tabular format.

11) Module Name: Manage Order Product

Purpose:

This module is to manage the each and every product in an order details of this system. Basically, this module will store information of the products ordered by the user. The user who will place an order gets an order id, then with the help of this module, for each respective order id, product name and its quantity details to be ordered are the details which are stored in database and displayed in the tabular format.

Input:

Order id Product Quantity Search Order Product

Output:

Order Product details are stored and acknowledgement is given .Also, the details are then displayed in tabular format. The input keyword in search box is searched instream_ide the database and related information is only displayed in tabular format.

12) Module Name: Manage Bill

Purpose:

This module is to manage the bill details of this system. Basically, this module will store information of the bill which is generated when an order of product is placed by this system. The user will generate bill of respective order by using details such as order id, wholesaler name, total amount and order received date .The user will have to generate the total amount of bill prior to generation of bill. Therefore, these information is stored in database and displayed in tabular format.

Input:

Order id Wholesaler Total Amt. Order Recd. date Search Bill

Output:

Bill details are stored and acknowledgement is given .Also, the details are then displayed in tabular format. The input keyword in search box is searched instream_ide the database and related information is only displayed in tabular format.

13) Module Name: Manage Bill Product

Purpose:

This module is to manage the details of product of each bill in this system. Basically, this module will store information of the product of each bill which is generated when an order of product is placed by this system. The user who will generate bill of respective order will get a bill id, then with the help of this module, for each respective bill id, product name and its quantity details are stored in database and displayed in tabular format.

Input:

Bill id Product Quantity Search Bill Product

Output:

Bill Product details are stored and acknowledgement is given .Also, the details are then displayed in tabular format. The input keyword in search box is searched instream_ide the database and related information is only displayed in tabular format.

14) Module Name: Reports

Purpose:

From above modules different reports are generated. Basically, this module is where we can generate reports for the module with the use of Crystal Reports. 'Crystal Reports' is a popular third party package that is included with Visual Basic.NET, which allows us to create reports for the application. Therefore, the details such as module name is provided to generate its report.

Input:

Report of Module

Output:

Report details are shown in tabular format.

3.12 Website Map Diagram



3.13 User Interface Design

<u>User Login</u>



OCSP HomePage



<u>User Details</u>

W OCSP	⊟ Home											
🧐 Kunal Sapotdar	User Details											Logout
î Master 👻	Add User Details											
Anage Users	Enter Full Name											
Anage Usertype	Enter Address											
Manage Streams												li
 Department Details Manage Products 	Enter Phone Number											
Manage Wholesaler	ПТ											~
↓ → → → → → → → → → → → → → → → → → → →												
🙀 Product Allocation	Administrator											~
👶 Stock In Maintenance	Enter Username											
🙀 Order details	Select Security Quest	ion										~
Bill details	- Sciele Security Quest	Ion										
	Enter Security Answer											
						ADD						
	Search User Details											
	Search	Search										
		Jearch										
	All User Details											Show All
			Username	Uld	Security_question	Security_answer	did	name	address	phone_no		
		Edit Delete		1	What is your fav color?	blue	16	Kunal Sarpotdar	Pune	8308308300		
		Edit Delete	ramjoshi	2	What is your hobby?	reading	13	Ram Joshi	Pune	9988899888		
		Edit Delete	rohanpande	4	What city were you born in?	Mumbai	13	Rohan Pande	Pune	7888078880		
		C	opyrig <mark>ht</mark> © 20	20-2	2021 OCSP. All rights	reserved.					V	ersion 1.0

<u>User type Details</u>

퉬 OCSP	≡ Home				
🧐 Kunal Sapotdar	User type Details				Logout
🕐 Master 💌 👻	Add User type Details				
💄 Manage Users	Enter UserType				
😩 Manage Usertype					
Manage Streams			AD	D	
🗓 Department Details					
🎉 Manage Products	Search User type Details				
船 Manage Wholesaler	Search	rch			
🗜 Manage Requirements					
<u>.</u>					
🙀 Product Allocation	All User type Details				Show All
🖬 Product Allocation 💩 Stock In Maintenance	All User type Details				Show All
💩 Stock In Maintenance	All User type Details	Edit Delata	Uld	Utype Administrator	Show All
ಿ Stock In Maintenance	All User type Details	Edit Delete Edit Delete	1	Administrator	Show All
💩 Stock In Maintenance	All User type Details	Edit Delete Edit Delete Edit Delete			Show All
ಿ Stock In Maintenance	All User type Details	Edit Delete	1	Administrator HOD	Show All

<u>Stream Details</u>

👋 OCSP	Ξ Home				
🧐 Kunal Sapotdar	Stream Details				Logout
🚯 Master 👻	Add Stream Details				
💄 Manage Users	Enter Sname				
🕌 Manage Usertype					
Manage Streams			3	ADD	
🗓 Department Details					
🗱 Manage Products					
🖁 Manage Wholesaler	Search Streams				
🗜 Manage Requirements	SearchSear	ch			
🙀 Product Allocation					
🍪 Stock In Maintenance	All Stream				Show All
📔 Order details			sid	sname	
		Edit Delete	1	Administration	_
		Edit Delete	2	Science	-
		Edit Delete	3	Management	-
		Edit Delete	4	Arts	-
		Edit Delete	5	Commerce	
		Copyright © 2020-2021 O	CSP. All rights r	eserved.	Version 1.0

Department Details

👜 ocsp	Ξ Home					
ۏ Kunal Sapotdar	Department Details					Logout
A Master	Add Department Details					
Amage Users	Enter Dname					
🚢 Manage Usertype						
📒 Manage Streams	Administration					v
🞚 Department Details						
🎉 Manage Products				ADD		
🌡 Manage Wholesaler						
🗜 Manage Requirements	Search Department					
🙀 Product Allocation		_				
& Stock In Maintenance	SearchSea	rch				
Y Order details						
	All Department					Show All
			did	dname	sid	
		Edit Delete	2	IT	2	
		Edit Delete	12	Scence	2	
		Edit Delete	13	Economics	5	
		Edit Delete	14	Accounts	5	
		Edit Delete	15	Psychology	4	
				12		
		Copyright © 2020-2021 (OCSP. All rights	s reserved.		Version 1.0

Product Details

👋 OCSP	Ξ Home						
鳑 Kunal Sapotdar	Product Details					l	Logout
🙆 Master 🔹 👻	Add Product Details						
Amage Users	Enter Product Name						
🕌 Manage Usertype							
📒 Manage Streams	Enter Brand name						
🗓 Department Details				ADD			
🗱 Manage Products							
🖁 Manage Wholesaler	Search Product Details						
F Manage Requirements	Search Flounce Delans						
🙀 Product Allocation	Search	rch					
👶 Stock In Maintenance							
📜 Order details	All Product Details					-	
🖁 Bill details			Pid	Pname	Brand		
		Edit Delete	1	Pen	Reynolds		
		Edit Delete	2	Pencil	Apsara		
		Edit Delete	4	Files	paperbond	-	
		Edit Delete Edit Delete	13	Scissor Stapler	KK Kangaroo		
		Edit Delete	14	123	Naligatou		
	-			120			
		Copyright © 2014-2019	OCSP. All righ	nts reserved.		Versi	ion 1.0

Wholesaler Details

👑 OCSP	≡ Home								
🧐 Kunal Sapotdar	Wholesaler Detail	S						Logout	
🙆 Master 🔹 👻	Add Wholesalert Details								
💄 Manage Users	Enter Wname								
🕌 Manage Usertype									
Manage Streams	Enter Contact no								
🗓 Department Details	Enter Email Id								
🎉 Manage Products									
🌡 Manage Wholesaler	Enter Address								
🗜 Manage Requirements								le le	
🙀 Product Allocation	Enter Alternate no								
🍰 Stock In Maintenance								le	
🙀 Order details					ADD				
	Search Wholesaler								
	Search								
	All Wholesaler Show All		1						
			Wname	Wcontact	Wemail	Waddr	Walno		
		Edit Delete 1	Ganesh Traders	8888000799	gtraders@gmail.com	ABC chowk Pune	8888800099		
	Copyright © 2020-2021 OCSP. All rights reserved. Version 1.0								
Stock in Maintenance Details

👑 OCSP	∃ Home	
🗐 Kunal Sapotdar	Stock in Maintenance Details	Logout
Master	Add Stock Details	
💄 Manage Users	Ganesh Traders	¥
🏝 Manage Usertype		
Manage Streams	Pen	*
🗓 Department Details	dd-mm-yyyy	
🎉 Manage Products		
🔓 Manage Wholesaler	Enter Price	
🗜 Manage Requirements	Enter Quantity	
🙀 Product Allocation		
lock In Maintenance	ADD	
P Order details		
	Search in Stock	
	Search	
	All Wholesaler Show All	
	st_no Wid Pid st_date price qty	
	Edit Delete 1 1 12-03-2021 00:00:00 10 10	
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Requirement Details

y ocsp	Ξ Home									
🔮 Kunal Sapotdar	Requirement Detail	S								Logout
🚯 Master 🗸 👻	Add Requirement Details									
Anage Users	Pen									¥
🏰 Manage Usertype 🗐 Manage Streams	Kunal Sarpotdar									¥
Department Details	Enter Required Quantity									
🎉 Manage Products										
🏦 Manage Wholesaler					ADD					
↓ F Manage Requirements										
🚧 Product Allocation	Search Department									
🍰 Stock In Maintenance	Searchse	arch								
🏽 Order details										
	All Requirements								Sł	10w All
			r_id	req_product	req_byUser	req_quantity	Username	Pid		
		Edit Delete	1	Pen	Kunal Sarpotdar	10	admin	1		
		Copyright © 202	20-202	1 OCSP. All rig	tts reserved.				Ve	rsion 1.0

Allocation Details

🥮 OCSP	≡ Home								
🗐 Kunal Sapotdar	Product Allocation I	Details							Logout
🙆 Master 🔹 👻	Add Allocation Details								
Anage Users	Kunal Sarpotdar								v
繼 Manage Usertype									
📒 Manage Streams	Kunal Sarpotdar								v
🗓 Department Details	Pen								v
🎉 Manage Products									
🖁 Manage Wholesaler		Quantity available							
🗜 Manage Requirements	Allocate Quantity								
🙀 Product Allocation				ADD					
Stock In Maintenance									
🙀 Order details	Search in Stock								
	Search Sea	arch							
	All Allocations Show All							-	
		alloc	id col_FromUser	col_ToUser	Pid	Quantity	Username		
		Edit Delete 1	Ram Joshi	Rohan Pande	1	10	ramjoshi		
		Copyright © 2020-202	1 OCSP. All rights r	eserved.					Version 1.0

3.14 Data Dictionary

Sr N o	Field Name	Data- type	Who lesal er_I dth	Description	Table Name	Numb er of Occur rences
1	address	varchar	20	Address of user	tbl_user	1
2	alloc_id	bigint	20	Allocation ID	tbl_allocation	1
3	bill_id	bigint	20	Bill ID	tbl_bill	2
4	billProduct_i d	bigint	20	Bill Product	tbl_billProduct	1
5	brand	varchar	20	Brand name	tbl_product	1
6	col_fromUse r	varchar	20	From User name	tbl_allocation	1
7	col_toUser	varchar	20	To User name	tbl_allocation	1
8	dept_id	bigint	20	Department ID	tbl_department	2
9	dept_name	varchar	20	Department name	tbl_department	1
10	name	varchar	20	Full name of user	tbl_user	1

11	order_date	date	20	Date of Order	tbl_order	1
12	orderRequir ement_id	bigint	20	Order ID	tbl_order	3
13	orderProduct _id	bigint	20	Order Product ID	tbl_orderProdu ct	2
14	order_qty	bigint	20	Order Quantity	tbl_orderProdu ct	1
15	order_receiv edDate	date	20	Date of Order Received	tbl_bill	1
16	password	varchar	20	Password of User	tbl_user	1
17	phone_no	bigint	10	Phone number of User	tbl_user	1
18	product_id	bigint	20	Product ID	tbl_product	5
19	product_na me	varchar	20	Product name	tbl_product	1
20	price	real	20	Product price	tbl_product	1
21	product_qua ntity	bigint	20	Product Allocation quantity	tbl_allocation	1
22	stock_qty	bigint	20	Product Stock quantity	tbl_stockMaint enance	1
22	requirement _id	bigint	20	Requirement ID	tbl_requireme nt	1

23	req_byUser	varchar	20	Requirement by User	tbl_requireme nt	1
24	req_product	varchar	20	Require Product name	tbl_requireme nt	1
25	req_quantity	bigint	20	Require quantity	tbl_requireme nt	1
26	security_ans wer	varchar	50	Security answer	tbl_user	1
27	security_que stion	varchar	50	Security question	tbl_user	1
28	stream_id	bigint	20	Stream ID	tbl_stream	2
29	stream_nam e	varchar	20	Stream name	tbl_stream	1
30	st_date	date	20	Date of adding stock	tbl_stockMaint enance	1
31	st_no	varchar	20	Stock maintenace ID	tbl_stockMaint enance	2
32	total_amt	real	20	Total Amount of Bill	tbl_bill	1
33	total_qty	bigint	20	Total quantity of Bill	tbl_bill	1
34	usertype_id	bigint	20	User type ID	tbl_usertype	2
35	username	varchar	20	Username of User	tbl_user	4

36	usertype	varchar	20	User type of user	tbl_usertype	1
37	wholesaler_ addr	varchar	50	Wholesaler Address	tbl_wholesaler	1
38	wholesaler_ alternateNo	bigint	10	Wholesaler alternate phone number	tbl_wholesaler	1
40	wholesaler_ contact	bigint	10	Wholesaler phone number	tbl_wholesaler	1
41	wholesaler_ email	varchar	50	Wholesaler phone number	tbl_wholesaler	1
42	wholesaler_I d	bigint	20	Wholesaler ID	tbl_wholesaler	3
43	wholesaler_ name	varchar	50	Wholesaler full name	tbl_wholesaler	1

3.15 Table Specifications

1. Table Name: tbl_user

Field name	Data	Size	Constraint
	type		
username	varchar	20	Primary key
password	varchar	20	Not null
security_question	varchar	50	Not null
security_answer	varchar	50	Not null
name	varchar	50	Not null
address	varchar	50	Not null
phone_no	bigint	10	Not null
usertype_id	big int	20	Foreign key
dept_id	big int	20	Foreign key

2. Table Name: tbl_usertype

Field name	Data type	Size	Constraint
usertype_id	bigint	20	Primary key
usertype	varchar	20	Not null

3. Table Name: tbl_stream

Field name	Data type	Size	Constraint
stream_id	bigint	20	Primary Key
stream_name	varchar	20	Not null

4.Table Name: tbl_depatment

Field name	e Data Siz		Constraint
	type		
dept_id	bigint	20	Primary key
dept_name	varchar	20	Not null
stream_id	bigint	20	Foreign key

5.Table Name: tbl_wholesaler

Field name	Data type	Size	Constraint
wholesaler_id	bigint	20	Primary key
wholesaler_name	varchar	50	Not null
wholesaler_contact	bigint	10	Not null
wholesaler_email	varchar	50	Not null

wholesaler_addr	varchar	50	Not null
wholesaler_alternateNo	bigint	10	Not null

6. Table Name: tbl_product

Field name	Field name Data Siz		Constraint
	type		
product_id	bigint	20	Primary key
product_name	varchar	20	Not null
brand	varchar	20	Not null

7. Table Name: tbl_allocation

Field name	Data	Size	Constraint
	type		
alloc_id	bigint	20	Primary key
product_id	bigint	20	Foreign key
product_quantity	bigint	20	Not null
col_fromUser	varchar	20	Not null
col_toUser	varchar	20	Not null
username	varchar	20	Foreign key

Field name	Data	Size	Constraint
	type		
requirement_id	bigint	20	Primary key
req_product	varchar	20	Not Null
req_byUser	varchar	20	Not Null
req_quantity	bigint	20	Not null
username	varchar	20	Foreign key
product_id	bigint	20	Foreign key

8. Table Name: tbl_requirement

9. Table Name: tbl_stockMaintenance

Field name	Data type	Size	Constraint
st_no	bigint	20	Primary key
wholesaler_id	bigint	20	Foreign key
product_id	bigint	20	Foreign key
st_date	date	20	Not null
price	real	20	Not null
qty	bigint	20	Not null

10.Table Name: tbl_order

Field name	Data	Size	Constraint
	type		
orderRequirement_id	bigint	20	Primary key
wholesaler_id	bigint	20	Foreign key
username	varchar	20	Foreign key
order_date	date	20	Not null

11.Table Name: tbl_orderProduct

Field name	Data	Size	Constraint
	type		
orderProduct_id	bigint	20	Primary key
orderRequirement_id	bigint	20	Foreign key
product_id	bigint	20	Foreign key
st_no	bigint	20	Foreign key
order_qty	Bigint	20	Not null

12.Table Name: tbl_bill

Field name	Dat	Siz	Constrain
	a	e	t
	type		
bill_id	bigin	20	Primary key
	t		
orderRequirement_i	bigin	20	Foreign key
d	t		
total_qty	bigin	20	Not null
	t		
total_amt	real	20	Not null
order_rdate	date	20	Not null

13.Table Name: tbl_billProduct

Field name	Data	Size	Constraint
	type		
billProduct_id	bigint	20	Primary key
bill_id	bigint	20	Foreign key
orderProduct_id	bigint	20	Foreign key

3.16 Test Procedures and Implementation

Software testing is a critical clement of software quality assurance & represents the ultimate review of specification, design and code generation. It is the process of executing a program with a primary objective of finding errors. Testing gives the guarantee that the software does not fail and runs according to its specification and in the way the end user expects. This can be done by various software testing techniques which provide a systematic guidance for designing tests that exercise the internal logic of software components, and exercise the input and output domains of the program to uncover errors in programming functions, behaviour and performance. Testing is the exposure of system to trial input to see whether it produces correct output. Testing is the process of detecting presence of faults. Once the source code has been generated, software must be tested to uncover as many errors as possible before delivery to your customer. Our goal is to design a series of test cases that have likelihood of finding errors. That's where Software testing Techniques enter into the picture. A set of test cases designed to exercise both internal login and external requirements is designed and documented, expected results are defined and actual results are recorded.

Testing Objectives:

The testing objectives are summarized in the following three steps 1. Testing is the process of executing a program with the intent of finding a bug.

2. A good case is one that has a high probability of finding an as yet undiscovered error.

3. A successful test is the one that uncover yet an undiscovered error.

Unit testing:

Unit testing, also known as component testing refers to tests that verify the functionality of a specific section of code usually at the functional level. In an object-oriented environment, this is usually at class-level and the minimal unit tests include the constructors and destructors. These types of tests are usually written by developers as they work on code (white-box style), to ensure that the specific function is working as expected. One function might have multiple tests, to catch corner cases or other branches in the code. Unit testing alone cannot verify the functionality of a piece of software, but rather is used to assure that the building blocks of the software work independently of each other.

Integration Testing:

Integration Testing is any type of software testing that seeks to verify the interfaces between components against a software design. Software components may be integrated in an interactive way or all together ("big bang"). Normally the former is constream_idered a better practice since it allows interface issues to be localized more quickly and fixed.

Integration testing works to expose defects in the interfaces and interaction between integrated components (modules). Progressively user groups of tested software components corresponding to elements of the architectural design are integrated and tested until the software works as a software.

System Testing:

System Testing tests a completely integrated system to verify that it meets its requirements. The testing phase is an important part of software development, It is the process of finding errors and missing operations and also a complete verification to determine whether the objectives are met and the user requirements are satisfied.

Acceptance Testing:

Acceptance testing is performed with realistic data of the client to demonstrate that the software is working satisfactorily. Testing here is focused on external behaviour of the system; the internal logic of the program is not emphasized. Test cases should be selected so that the largest number of attributes of an equivalence class is exercised at once. The testing phase is an important part of software development. It is the process of finding errors and missing operations and also a 99 complete verification to determine whether the objectives are met and the user requirements are satisfied. Acceptance testing is performed along with the client to show that to see that all requirements are satisfied whatever may be the attributes its working well provided all the attributes are valid. If not, it displays corresponding messages for getting valid attributes.

Beta Testing:

Beta testing comes after alpha testing and can be constream_idered a form of external user acceptance testing. Versions of the software, known beta versions, are released to a limited audience outstream_ide of the programming team. The software is released to groups of people so that further testing can ensure the products have few faults or bugs. Sometimes, beta versions are made available to the open public to increase the feedback filled to a maximal number of future users.

Usability Testing:

Usability testing is needed to check if the user interface is easy to use and understand. It is connected mainly with the use of the application.

Security Testing:

Security testing is essential for software that processes confidential data to prevent system intrusion by hackers.

White Box Testing:

This is the unit testing method where a unit will be taken at a time and tested thoroughly at a statement level to find the maximum possible errors. We tested stepwise every piece of code, taking care that every statement in the code is executed at least once; the white box testing is also called glass box Testing.

Black Box Testing

This testing method constream_iders a module as a single unit and checks the unit at interface and communication with other modules rather getting into details as statement level. Output for a given set of input combinations are forwarded another module.

Test Case ID	Scenario to Test	Steps to perform	Expected Result	Actual Result	Pass/Fail
TCL1	Login into application as Administrator/ HOD/ Staff.	 Open the Login page of the application. Enter the valid Username. Enter the valid Password. Click on the Login button. 	Application should accept the valid username and valid password entered by the user and should direct user to homepage of the application.	the application is successful.	Pass
TCL1.1	Login into application	 1.Open the Login page of the application. 2.Enter the valid Username. 3.Enter the invalid Password. 4.Click on the Login button. 	Application should not accept the invalid username. Application should display message "Username or password incorrect. Please Enter valid username and password"	11	Pass
TCL1.2	Login into application	1.Open the Login page	Application	Application	Pass

TCL1.3	Login into application	of the application. 2.Enter the invalid Username. 3.Enter the valid Password. 4.Click on the Login button. 1.Open the Login page of the application. 2.Keep Username empty. 3.Keep Password Empty. 4.Click on the Login button.	should not accept the invalid password. Application should display message "Username or password incorrect. Please Enter valid username and password" Application should not accept the empty fields and deny log in. Application should not accept the empty fields and deny log in. Application should display message on respective fields of Username "Username is required" and password	Login denied with appropriate message.	Pass
TCP1	Manage	1.Open the	and password "Password is required" Application	Product	Pass
	Product	Product page	Should accept the	details are displayed	

	Details: details.	Add	of the application. 2.Enter Product name. 3.Enter Brand name. 4.Click on the ADD button.	product details and details should be displayed as filled by user.	as filled by user	
TCP1.1	Manage Product Details: details.	Add	1.Open the Product page of the application. 2.Do not enter Product name and keep it empty. 3.Enter Brand name. 4.Click on the ADD button.	Application should not accept the product details and Product name field should display message "Product name is required"	name field displayed the	Pass

TCP1.2	Manage Product Details: Add details	 1.Open the Product page of the application. 2.Enter Product name. 3. Do not enter Brand name and keep it empty. 4.Click on the ADD button. 	Application should not accept the product details and Brand name field should display message "Brand name is required"	Brand name field displayed the message "Brand name is required" and application not accepted any details.	Pass
TCP1.3	Manage Product Details: Search details	 1.Open the Product page of the application. 2.Enter Product name in search field. 3.Click on the Search button. 	Application should accept the product name and display its details.	Application accepted the product name and displayed its details.	Pass

TCP1.4	Manage Product Details: Search details	1.Open the Product page of the application. 2.Keep field of product search empty. 3.Click on the Search button.	Search is	Application displayed message "Product Search is required" on respective field.	Pass
TCUT1	Manage User type Details: Add Details	1.Open the User Type page of the application. 2.Enter User type. 3.Click on the ADD button.	accept	Application accepted details and display it.	Pass
TCUT1.1	Manage User type Details: Add Details	User Type page of the application. 2.Keep	accept the User type details and User type field should display message	field displayed message "User type is	Pass

TCUT1.2	Manage User type Details: Search Details	1.Open the User Type page of the application. 2.Enter User type in search field. 3.Click on the Search button.	Application should accept the User type and display its details.	type and	Pass
TCUT1.3	Manage User type Details: Search Details	User Type page of the application. 2.Keep	Application should not accept the User type details and search field should display message "User type is required"	field should display	Pass
TCS1	Manage Stream Details: Add Details	1.Open the Stream page of the application. 2.Enter Stream name. 3.Click on the ADD button.	Application should accept details and display it.	Application accepted details and display it.	Pass

TCS1.1	Manage Stream Details: Add Details	1.Open the Stream page of the application. 2.Keep Stream name field empty. 3.Click on the ADD button.	details and Stream name field should display		Pass
TCS1.2	Manage Stream Details: Search Details	1.Open the Stream page of the application. 2.Enter Stream name in search field. 3.Click on the Search button.	data related to Stream name which is entered by user to	displayed only the data related to Stream name which was entered in	Pass

CHAPTER 4

USER MANUAL

4.1 User Manual

For any system to be successful it is important that the intended user find the system easy to operate. The purpose of the user manual is to make user acquainted with the system and help user understand the system and operate it conveniently. The User Manual is prepared reflexively because it is an item that must accompany every system.

The manual contains several screenshots that describes how to use the entire system. This Manual helps user to navigate efficiently through the system and help user to solve issues wherever they occur.

Information about the system.

The system contains following users:

1)Admin

2)HOD

3)Staff

The system has following features:

- 1) Admin/HOD Dashboard
- 2) Adding Products in Stock.
- 3) Sending products' requirements.
- 4) Allocation of products to specified user.
- 5) Managing stock in maintenance
- 6) Generating product orders
- 7) Generating Bill.
- 8) Reports

Log in into the system using valid credentials. You are redirected to dashboard after successful credential verification of Username and Password.





the Homepage. It contains all the module tabs.

In case of Admin, dashboard contains following tabs:





This tab is for managing all product stock in maintenance details. It is used for redirecting Stock in maintenance module of the project.

F Manage Requirements

This tab is for managing all product

requirement details. It is used for redirecting Requirement module of the project.

Product Allocation This tab is for managing all product allocation details. It is used for redirecting Product Allocation module of the project.

Y Order details This tab is for managing all product

order details. It is used for redirecting Order module of the project.



This tab is for managing all bill

details. It is used for redirecting Bill module of the project.

4.2 Operation Manual

There are various links and buttons on the web application. Here are their operations:

Link	Operation
2021 OCSP. All rights res	Redirects to Homepage
Logout	Redirects to Login Page
Edit	For updating records in tables
Delete	For deleting records in tables
Show All	For displaying all records in tables

Button	Operation
ADD	For inserting data into table
Search	For finding data from table
Get Quantity available	For fetching stock quantity

4.3 Program Specifications

1)UserDetails

Module	UserDetails
Program name	UserDetails
Purpose	Add ,update, delete and read details of user into tblUser.
Input Details	The required fields should not be blank and the user should provide valid data for each field.
Output	The details of the user are stored in the tblUser.

2)UserTypeDetails

Module	UserTypeDetails
Program name	UserTypeDetails
Purpose	Add ,update, delete and read details of user into tblUsertype table.
Input Details	The required fields should not be blank and the user should provide valid data for each field.
Output	The details of the user are stored in the tblUsertype table.

3)Streams

Module	Streams
Program name	Streams
Purpose	Add, update, delete and read details of stream into tblStream table.
Input Details	The required fields should not be blank and the user should provide valid data for each field.
Output	The details of the stream are stored in the tblStream table.

4)Department

Module	Department
Program name	Department
Purpose	Add, update, delete and read details of department into tbldept.
Input Details	The required fields should not be blank and the user should provide valid data for each field.
Output	The details of the department are stored in the tbldept.

5)Products

Module	Products
Program name	Products
Purpose	Add, update, delete and read details of product into Product table.
Input Details	The required fields should not be blank and the user should provide valid data for each field.
Output	The details of the product are stored in the Product table.

6)Wholesaler

Module	Wholesaler
Program name	Wholesaler
Purpose	Add, update, delete and read details of wholesaler into tblWholesaler table.
Input Details	The required fields should not be blank and the user should provide valid data for each field.
Output	The details of the wholesaler are stored in the tblWholesaler table.
Module	StockInMaintenance
---------------	--
Program name	StockInMaintenance
Purpose	Add, update, delete and read details of product stock into StockInMaintenance table.
Input Details	The required fields should not be blank and the user should provide valid data for each field.
Output	The details of the product stock are stored in the StockInMaintenance table.

8)Requirement

Module	Requirement
Program name	Requirement
Purpose	Add, update, delete and read details of product requirement into tblRequirement table.
Input Details	The required fields should not be blank and the user should provide valid data for each field.
Output	The details of the product requirement are stored in the tblRequirement table.

Module	ProductAllocation
Program name	ProductAllocation
Purpose	Add, update, delete and read details of product allocation into tblAllocation table.
Input Details	The required fields should not be blank and the user should provide valid data for each field.
Output	The details of the product allocation are stored in the tblAllocation table.

8)ProductAllocation

9)Order

Module	Order
Program name	Order
Purpose	Add, update, delete and read details of product order into tblOrder table.
Input Details	The required fields should not be blank and the user should provide valid data for each field.
Output	The details of the product order are stored in the tblOrder table.

Module	OrderProduct
Program name	OrderProduct
Purpose	Add, update, delete and read details of ordering products into tbl_orderProduct table.
Input Details	The required fields should not be blank and the user should provide valid data for each field.
Output	The details of the ordering products are stored in the tbl_orderProduct table.

10)OrderProduct

11)Bill

Module	Bill
Program name	Bill
Purpose	Add, update, delete and read details of bill into tbl_Bill table.
Input Details	The required fields should not be blank and the user should provide valid data for each field.
Output	The details of the bill are stored in the tbl_Bill table.

12)Bill

Module	BillProduct
Program name	BillProduct
Purpose	Add, update, delete and read details of billing products into tbl_BillProduct table.
Input Details	The required fields should not be blank and the user should provide valid data for each field.
Output	The details of the billing products are stored in the tbl_BillProduct table.

DRAWBACKS AND LIMITATIONS

Drawbacks and Limitations:

- Due to web nature, if server down then system doesn't work.
- System has limited access and database.
- It is assumed that all the data entered by the user is accurate and correct.
- No payment gateways.

PROPOSED ENHANCEMENT

Proposed Enhancements:

No system is complete. It requires changes as and when user demands a new feature. Also, there are some aspects where the system can be always improved upon.

Thus, the new system leaves chances for further improvements which can be described as follows:

- System does not include online payment that provision would be provided.
- System will make mobile computing.

CONCLUSION

Conclusion:

- Thus the "Online College Stationary Portal" web application helps reduce time and usage of paper work while keeping information regarding stationary of college.
- Various reports are generated by system that helps to understand and study the basic working that helps in analysis of system.
- Admin handles the system efficiently for handling of Order and keeping track on allocation of products to different departments.
- The system finally helps to reduce time for operation, reduce human efforts and reduces work which is unnecessary.
- We have tried to develop this system keeping in mind the user of the system. So, there is not much need for a trained professional to use this system.

Bibliography:

Reference:

Designing and implementation phase: -

- 1. Software engineering: a practitioner's approach by roger s pressman.
- 2. System analysis and design by Elias M. Awad.
- 3. DBMS: Bipin C Desai

Online References:

- https://en.wikipedia.org/wiki/Data_flow_diagram
- <u>www.w3school.com</u>
- <u>https://dotnet.microsoft.com/learn/csharp</u>
- <u>https://www.w3schools.com/sql/sql_ref_sqlserver.asp</u>

ANNEXURES

ANNEXURE 1: USER INTERFACE SCREENS

<u>User Login</u>

1		User Login
R.		Usemame & Type your username
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1 and		LOGIN Forgot Password?

Forgot Password

Forgot Password Recover	y
Enter Mobile Number:	Mobile Number
Security Question :	What is your hobby?
Enter your answer:	Enter Security Answer
Recover password	
Your Username :	
Your Password :	
Login	

OCSP HomePage



<u>User Details</u>

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🧐 Kunal Sapotdar	User Details											Logout
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🛎 Manage Usertype = Manage Streams	Enter Address											
Department Details												li
X Manage Products	Enter Phone Number											
🏦 Manage Wholesaler	п											~
↓ F Manage Requirements												
🙀 Product Allocation	Administrator											~
👶 Stock In Maintenance	Enter Username											
🋱 Order details	Select Security Quest	on										~
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<u>User type Details</u>

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<u>Stream Details</u>

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🗓 Department Details					
🎉 Manage Products					
🌡 Manage Wholesaler	Search Streams				
🗜 Manage Requirements	Search				
🙀 Product Allocation					
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		Edit Delete	2	Science	
		Edit Delete	3	Management	
		Edit Delete	4	Arts	
		Edit Delete	5	Commerce	
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Department Details

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ۏ Kunal Sapotdar	Department Details					Logout
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🗓 Department Details						
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le Stock In Maintenance	Search Search					
Y Order details						
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		Edit Delete	15	Psychology	4	
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Product Details

실 OCSP	Ξ Home					
🔮 Kunal Sapotdar	Product Details					Logov
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💄 Manage Users	Enter Product Name					
繼 Manage Usertype						
📒 Manage Streams	Enter Brand name					
🗓 Department Details				ADD		
🗱 Manage Products						
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		Edit Delete	4	Files	paperbond	
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		Edit Delete	14	Stapler	Kangaroo	
				123		
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Wholesaler Details

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🧐 Kunal Sapotdar	Wholesaler Detail	S							Logout
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🐸 Manage Usertype									
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🗓 Department Details	Enter Email Id								
🗱 Manage Products									
🌡 Manage Wholesaler	Enter Address								
🗜 Manage Requirements									
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Stock in Maintenance Details

👑 OCSP	⊟ Home									
🧐 Kunal Sapotdar	Stock in Maintenan	ce Details								Logout
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💄 Manage Users	Ganesh Traders									v
🕌 Manage Usertype										
Manage Streams	Pen									۷
🗓 Department Details	dd-mm-yyyy									
🗱 Manage Products										
🔓 Manage Wholesaler	Enter Price									
F Manage Requirements	Enter Quantity									
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Requirement Details

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🧐 Kunal Sapotdar	Requirement Details		Logout
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💄 Manage Users	Pen		v
📽 Manage Usertype			
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🗓 Department Details	Enter Required Quantity		
🎉 Manage Products			
🖁 Manage Wholesaler		ADD	
↓ F Manage Requirements			
🙀 Product Allocation	Search Department		
👶 Stock In Maintenance	Search	ħ	
🖁 Order details			
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Allocation Details

👋 OCSP	∃ Home								
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🙆 Master 👻 👻	Add Allocation Details								
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🕌 Manage Usertype									
📒 Manage Streams	Kunal Sarpotdar								*
🗓 Department Details	Pen								~
🎉 Manage Products									
🖁 Manage Wholesaler	Quantity in Stock Get Quantity av	vailable							
🗜 Manage Requirements	Allocate Quantity								
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Order Details

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🧐 Kunal Sapotdar	Order Details						Logout
A Master	Add Order Details						
🛓 Manage Users	Order By user :						
ቆ Manage Usertype	Kunal Sarpotdar						v
📒 Manage Streams	From Wholesaler:						
🗓 Department Details	Ganesh Traders						 ~
🎉 Manage Products	Gancsin naders						
🌡 Manage Wholesaler	dd-mm-yyyy						٥
🗜 Manage Requirements				Gene	rate Order		
🙀 Product Allocation							
🎄 Stock In Maintenance	Add Products to Order>						
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Order Product Details

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Master	Add Order Product Details							
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🕌 Manage Usertype	1							*
Manage Streams								
🖩 Department Details	Select Product :							
X Manage Products	Pen							*
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🗜 Manage Requirements			A	dd To Ord	er			
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Bill Details

W OCSP	⊟ Home		
Manage Streams	Bill Details		Logout
🗓 Department Details	Add Bill Details		
🇱 Manage Products			
🖁 Manage Wholesaler	Order ID:		
F Manage Requirements	1		v
🙀 Product Allocation		Generate Total Quantity & Amount	
👶 Stock In Maintenance	Enter total qty		
🍹 Order details	Enter total amount		
Bill details	Enter total amount		
🕐 Reports 🔹 👻	dd-mm-yyyy		
O User		Generate Bill	
O User type			
	Go to Bill Product details>	Bill Product details	
	Search Order		
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	All Orders		Show All
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Bill Product Details

👋 OCSP	Ξ Home		
🗐 Kunal Sapotdar	Bill Product Details		Logout
🙆 Master 🔹 👻	Add Bill Product Details		
Amage Users	Select Bill(ID):		
繼 Manage Usertype			v
Manage Streams			
🗓 Department Details	Select Product :		~
🎉 Manage Products	1		V
🖁 Manage Wholesaler	Enter Price		
🗜 Manage Requirements		Add To Bill	
🙀 Product Allocation			
🍰 Stock In Maintenance	Back to Bill>		
🏋 Order details		Gen Bill	
Bill details	Search Bill Product		
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ANNEXURE 2: OUTPUT REPORTS WITH DATA

<u>User Report</u>

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🙆 Reports 🔹 👻	1	of 1 >	0 Id	€ 100%	•	6				
O User						Ū.	A			
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Product Report



<u>Requirement Report</u>

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Order Report

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O Streams	order_id	wholesaler	fromUser	orderDate	orderStatus	
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Order Product Report



Bill Report



Bill Product Report

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O Products	billProduct_id bill_id product quantity price									
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ANNEXURE 3: SAMPLE PROGRAM CODE

Module: Manage Stream

Stream.aspx.cs:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Data;
using System.Data.SqlClient;
namespace OCSP_FinalProject
{
 public partial class Streams : System.Web.UI.Page
  {
   SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename='D:\OCSP FinalProj
ect\OCSP_FinalProject\App_Data\OCSP_DB.mdf';Integrated
Security=True");
    protected void Button1_Click(object sender, EventArgs e)
    {
      con.Open();
      SqlCommand cmd = new SqlCommand("insert into
tblStream(sname) values('" + stream1.Text + "')", con);
      stream1.Text = "";
      cmd.ExecuteNonQuery();
      con.Close();
      bindStream();
    }
    private void bindStream()
    {
      DataSet ds = new DataSet();
```

```
SqlDataAdapter ad = new SqlDataAdapter("select * from
tblStream", con);
      ad.Fill(ds);
      GridView1.DataSource = ds;
      GridView1.DataBind();
    }
    protected void Page_Load(object sender, EventArgs e)
    {
      if (!IsPostBack)
      {
        bindStream();
      }
    }
    protected void Button2 Click(object sender, EventArgs e)
    {
      DataSet ds = new DataSet();
   SqlDataAdapter ad = new SqlDataAdapter("select * from tblStream
where sname='" + searchbox.Text + "'", con);
      ad.Fill(ds);
      GridView1.DataSource = ds;
      GridView1.DataBind();
    }
    protected void Buuton3_Click(object sender, EventArgs e)
    {
      bindStream();
    }
    protected void GridView1 PageIndexChanging(object sender,
GridViewPageEventArgs e)
    {
      GridView1.PageIndex = e.NewPageIndex;
      bindStream();
    }
    protected void GridView1 RowDeleting(object sender,
GridViewDeleteEventArgs e)
    {
      int sid = Convert.ToInt32("" +
GridView1.DataKeys[e.RowIndex].Values[0]);
      con.Open();
      SqlCommand cmd = new SqlCommand("delete from tblStream
where sid=" + sid, con);
      cmd.ExecuteNonQuery();
      con.Close();
      this.bindStream();
```

```
protected void GridView1 RowDataBound(object sender,
                     GridViewRowEventArgs e)
    {
      if (e.Row.RowType == DataControlRowType.DataRow &&
e.Row.RowIndex != GridView1.EditIndex)
      {
        (e.Row.Cells[0].Controls[0] as
LinkButton).Attributes["onclick"] = "return confirm('Do you want
to update this row?');";
     }
    }
    protected void OnRowEditing(object sender,
GridViewEditEventArgs e)
    {
      GridView1.EditIndex = e.NewEditIndex;
      this.bindStream();
   }
    protected void GridView1 RowUpdating(object sender,
GridViewUpdateEventArgs e)
    {
      //get row
      GridViewRow row = GridView1.Rows[e.RowIndex];
      int sid =
Convert.ToInt32(GridView1.DataKeys[e.RowIndex].Values[0]);
      string stream = (row.Cells[2].Controls[0] as TextBox).Text;
      con.Open();
      SqlCommand cmd = new SqlCommand("update tblStream set
sname='" + stream + "' where sid=" + sid, con);
     cmd.ExecuteNonQuery();
      con.Close();
      GridView1.EditIndex = -1;
      this.bindStream();
    }
    protected void GridView1_RowCancelingEdit(object sender,
GridViewCancelEditEventArgs e)
   {
      GridView1.EditIndex = -1;
      this.bindStream();
    }
  }}
```

}

ROH TECHNO SERVICES

Date: 10th June 2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr.Kunal M. Sarpotdar, MCA final year student of MES'S INSTITUTE OF MANAGEMENT AND CAREER COURSES Pune, has completed Six month project internship in our company on the project **"Online College Stationery Portal"** under the guidance of Ms. Aparna Janwalkar (Project Head), during the period from Dec 2020 to June 2021.

During his training, we found him very sincere, hardworking and fully devoted to assignment.

We wish him all success to his future career

Regards,



Kavita Nimbhorkar Co-founder