4.1 User Manual :

Each user in this system has unique role. Some tasks

are dependent between the users. Following are the users of system.

1. Admin

2. Project Manager

3. Quality Analyst.

4. Developer.

Predefined-Roles:

1.Admin

-Admin has authority to maintain the master entries in the system. Like Usertype,BugStatusTypeetc are the tables in which new entries can be made only by admin.

Admin also responsible to maintain the personal details of all the types of user of system. Admin can create the login account of every user. Also if any user forgot loginId or password, admin can recover that password and provide to the particular user.

2.Project Manager

-Manager is responsible to maintain the project details along with client details. Project Manger can be able to make the project entries . System also allows to maintain the sub-modules efficiently

With reference to the project.

Manager can able to maintain the client information. This system will generate unique client id which is used to differentiate the queries and project details of that particular client.

Manager can able to set the permissions of quality analysts for designing and executing test cases. Also he can assign the task or module to the quality analyst for designing or executing test cases.

When QA files any bug, initially it is unapproved . It is approved by manager. This system provide such functionality.

Manager can be able to see the test case results with appropriate formatting.

3. Quality Analyst:

QA is the main user of this system. QA is responsible to design, execute and maintain the quality of software products by performing execution of testcases.
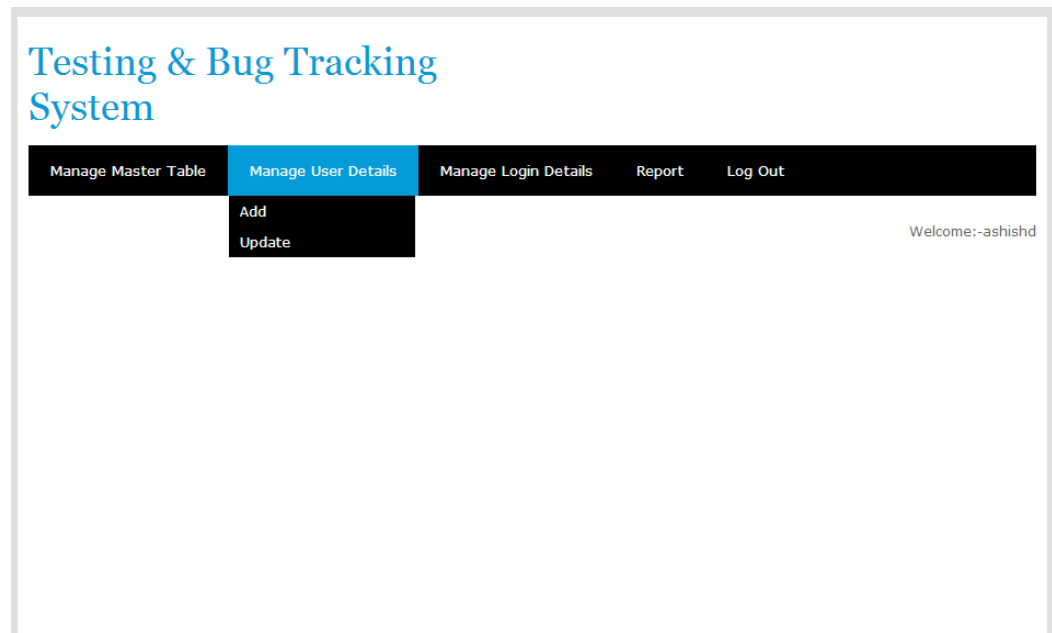
Also if QA found any bug while using the software then he can file the bug for unique project wise and module wise.

4.Developer:

-Developer can able to see the bugs which are allocated to him by manager. He can update that bug status by solving the the bug.

4.2Operations Manual :

## Admin Menus:-

-In above diagram we can see four menu's.

In "Manage Master Tables" admin can make the master entries in master tables egUserType,BugStatus etc.

In "manage user" admin can add users personal details where unique id is generated by system.

In "manage login" menu, admin can allocate the login id and password to every user.

In "report" menu admin can able to see all the records available in database.

Project Managers Menu:-
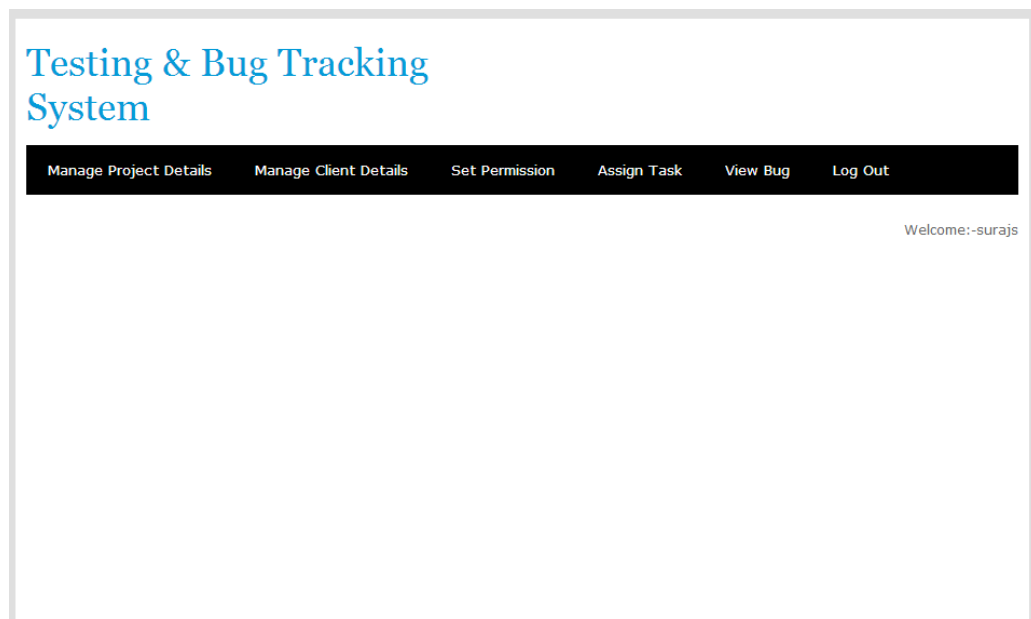
In first menu "Manage Project Details" Project Manager can make entries of software project details. It also has sub menu to maintain the sub modules information.

In the menu "Manage Client Details" Project Manager can add and update the clients information. Clients queries can also be stored using this menu.

"Set Permission" menu is used to set the authorities to senior and junior QA.

Using "Assign Task" menu Project Manager can assign the modules for designing or executing test cases.

"View Bug" menu shows approved and unapproved bugs to project manager. He can update the bug and can assign the bug to particular developer.

Quality Analyst Menu:-
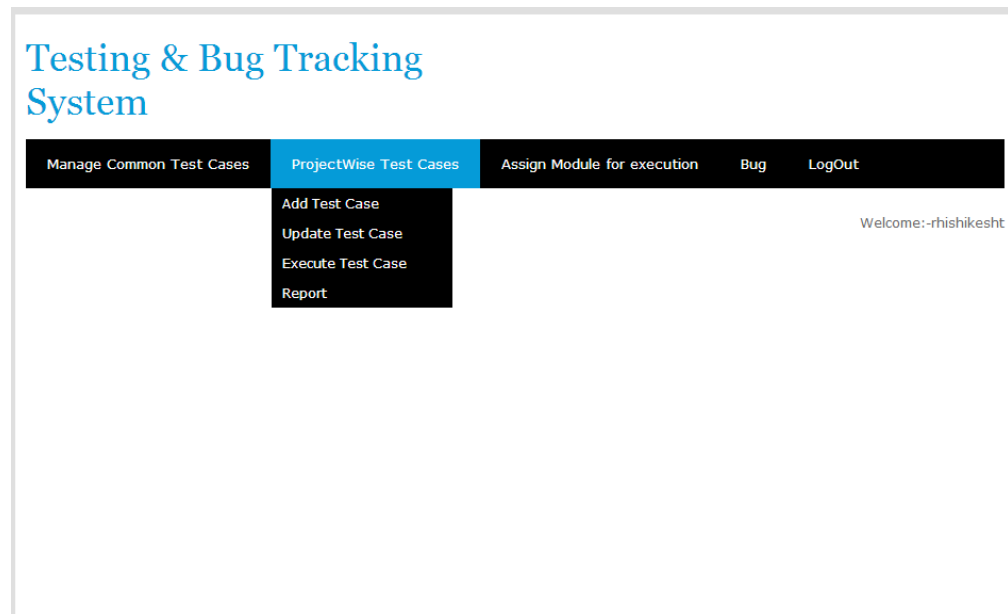
> "Manage Common Test case "menu contains common test cases and field(frame) details which are common in many software projects so that we can reuse the same test cases for many projects.

> "Project wise Test cases "Menu - Some test cases are unique

Or they are only used to single projects such   test cases are managed in this menu. QA can execute the test cases which are allocated to him.

Senior QA can assign the module for execution to junior Quality Analyst using "Assign Task" menu.

When QA finds any bugs in software he can file that bug using "File Bug" menu. This request is updated by project manager.

4.3 Program Specification :

Lets understand how the test cases are managed.

1 Project Registration :-

Project Manger registers the project information by selecting the option "add project details" from menu "manage project details".

Here a unique project id is generated by system which is used to maintain the sub-modules of that project.

In same manner modules of projects get added by manager.

1   Designing test cases:-

Project manager assigns the registered modules for designing Test cases to Senior QA who has permission to design the test cases which itself is set by the project manager. After designing the test cases the module is ready with the bunch of test cases for particular project.

2 Executing Test cases:-

After designing the test cases for modules of project, test cases should be executed by Junior QA. Now manager or Senior QA assigns designed module to junior QA by from menu "Assign Task". In that form QA/Manager selects project name , module name and QA name who is going to execute the test cases.

Now junior QA selects the execute " project wise test case" menu . When he goes to that form only projects which are allocated to him can be seen by QA. Then he can select project name and module name. After selecting these menu

He clicks on "load test cases" to load the test cases. There may be many test cases .He can move to next test case by clicking next button. Same wise there are previous, first and last buttons are available.

Then QA performs the steps given in the test case and checks if the actual output is matches with expected output. If "yes" then he can update the result by selecting the result option "Passed".

4. Bug Registration :-

Apart from executing the test cases if QA find any bug in the project , he can file/report a bug from menu "File bug". This bug request is view by the respective manager. Manager checks the request and update the bug status. Manager assigns that bug to the developer by entering developer id in the field. Then developer checks the bug details and update the bug status .

Drawbacks And Limitations:-

- This system contains only test cases which are performed manually by the quality analyst. System does not have any testing tool module which is the part of automation testing.

- The system doesn't give any notification message after every update which is related with the particular user.

- Notification mail option is not available in the system.

Proposed Enhancements:-

- Email Notification-

  Current system is having the process such that when the bugs

  get updated, system does not give any update to related users

  of bugs.

- Communicate-

  In current system the users of system like developer, Quality

  analyst, project manager and admin are communicating via

  External tools e.g. Email, chat etc. So to overcome this

drawback, module is required to solve this problem.

Conclusion:-

In the Present world of technology where computer has become the primary necessity of each and every field, the software developed gives the way to handle manual work in very efficient and very correct way.

The project was expected to complete using the SDLC (Software Development Life Cycle) approach.

The actual implementation of these aspects gave exposure to the problem in real life situation involved in project development and how to handle them in efficient manner.

All the masters, transactions and procedures of the modules

are maintained as per the documentation and the developed system is satisfying all the requirements of the users.