American International University-Bangladesh (AIUB)
Department of Computer Science
Faculty of Science &Technology (FST)
Spring 22 23

Section: A

Software Quality Assurance and Testing

Online Flat Buy Sell Management System

A Report submitted
By

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ID:- 20-42949-1

Under the supervision of

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Department of Computer Science
Faculty of Science and Technology
American International University-Bangladesh

Software Test Plan

for

<Online Flat Buy Sell Management System>

Version 1.0 approved

Prepared by <Sudipta Saha, Razib Saraff, Ummey Habiba Bristy>

<American International University- Bangladesh>

<27.03.2023>

Checked By Industry Personnel

Name:

Designation:

Company:

Sign:

Date:

Table of Contents

Revision History

Revision	Date	Updated by	Update Comments
0.1	2023.03.27	Sudipta Saha	First Draft
0.2	2023.03.27	Razib Saraff	Second Draft
0 3	2023.03.27	Ummey Haiba Bristy	Third Draft

1. TEST PLAN IDENTIFIER: SRB-S20

2. REFERENCES

- https://educate.muzamelhashimi10.be/

3. INTRODUCTION

Background to the Problem

- Online flat buy sell management system is becoming so popular in our society, as it can save lot of our time and affords. With the aid of this technology, we can quickly compile all the necessary data for management. Main Purpose is to create web application which will manage of these different modules.
- Our system is built and design in such a way that the buyer and seller both will feel comfortable to see, buy and sell their flats. They will also be able to chat with each other and also be able to ask for any help if needed from admin. The suggested approach offers the simplest way to handle all areas of flat buy & sell management.

Solution to the Problem

- Our System Provide the activities of sellers and buyers. Using this system, a buyer can see flat details, flat price, flat availability, can contact with seller and also order the available flat, payment etc. We are ensuring the buyer information security.

    - Accounts
    - Online Registration
    - Messaging System
    - Buyer/Seller Login
    - Contact system
    - Adding and editing apartment list

- We are passionate that we want to provide firs-rate service. Because customer happiness is our top goal. We also concentrate on our operational management sections and recruitment sections. Our primary objective is to ensure that our customers are completely satisfied with our services, and we achieve this by focusing on various aspects of our business.

- Our platform is designed to streamline the day-to-day tasks of property managers and real estate agents, enabling them to easily manage their properties and clients. In addition to this, our platform offers real-time updates to clients, keeping them informed about their properties, offers, and deals. Our system is highly secure, ensuring the safety and privacy of all user information.

4. REQUEIREMNT SPECIFICATION

4.1 System Features

1. Software Features

4.1.1.1 Functional Requirements

1.1 The user login into the software with their username and password.

1.2 If the login successful the main home page in this software will be displayed.

1.3 If the user forgets the username and password so they can be reset password usingtheir valid email address and phone number.

1.4 If the user input 3 times wrong password, the system will block the user account loginfor half one hour.

Priority level: High

Precondition: User have valid username and password.

Cross-references: None

2. Admin

4.1.1.2 Functional Requirements

2.1 Monitoring user information by maintaining accurate database of all ID

2.2 If the user is valid on his /her information then add that user add as buyer/seller

.

2.3 Admin will able to see the apartment list status. Admin has the access to add/remove buyer and seller. Admin can also access managers.

Priority level: High

Precondition: Admin must have the rights to access the whole system.

Cross-references: 1.1, 1.2, 3.1

3. Accounts

4.1.1.3 Functional Requirements

3.1 The payment transaction will be done using user ID.

3.2 The payment slip can be gotten from the account department using ID.

3.3 Then the payment information will show in the portal.

Priority level: High

Precondition: Payment system must be pay using user ID.

Cross-references: 2.1, 2.2, 2.3

4. Online Apartment Searching and Editing

4.1.1.4 Functional Requirements

4.1 User can search apartment by their desired price from the website.

4.2 User can search apartment by their desired location.

4.3 User can easily submit their information through the site.

Priority level: Medium

Precondition: Must be in logged in condition

Cross-references: 4.1, 6.2

5. Chat

4.1.1.5 Functional Requirements

5.1 Buyer/ Seller can chat with admin.

5.2 Through chat they can ask for any help.

5.3 Admin can give them proper solution.

Priority level: Medium

Precondition: Must be in logged in condition

Cross-references: 5.1, 6.2

6. Review

4.1.1.6 Functional Requirements

6.1 User can give review from the customer by the basis of their service.

6.2 Customer can see the review of service provider in their details option.

6.3 User can give a comment in review comment section.

Priority level: Medium

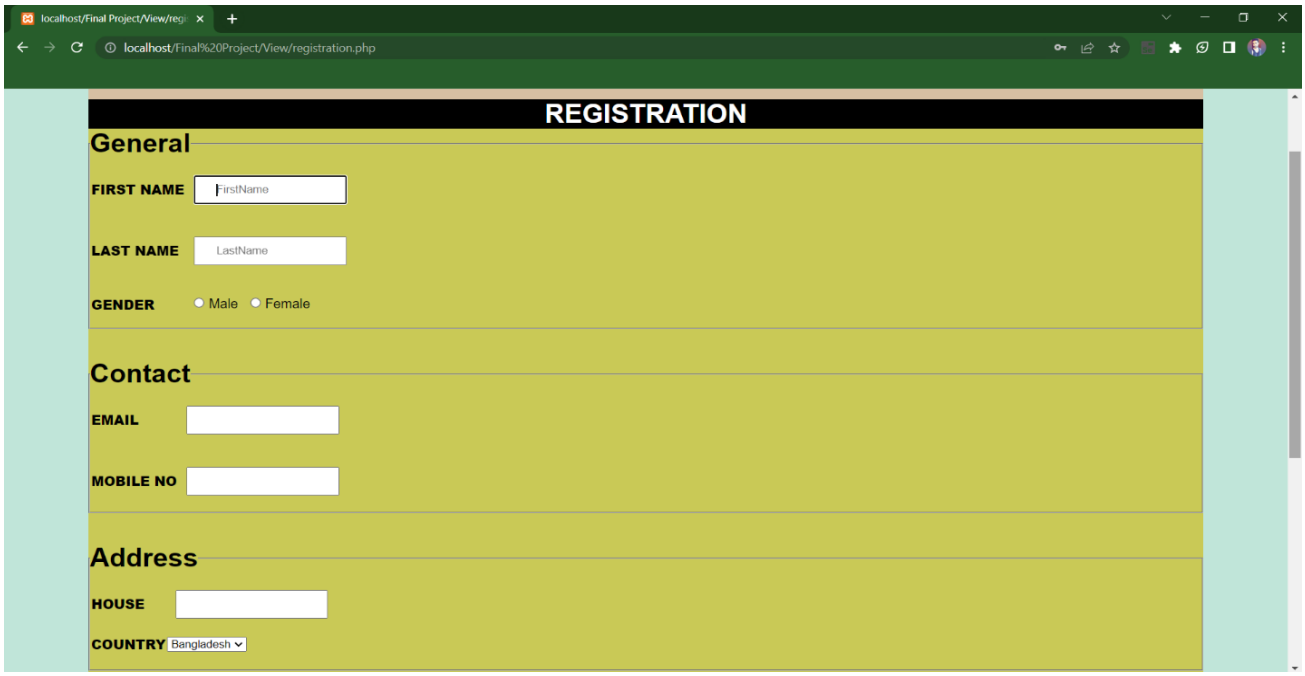
Precondition: Have a valid account

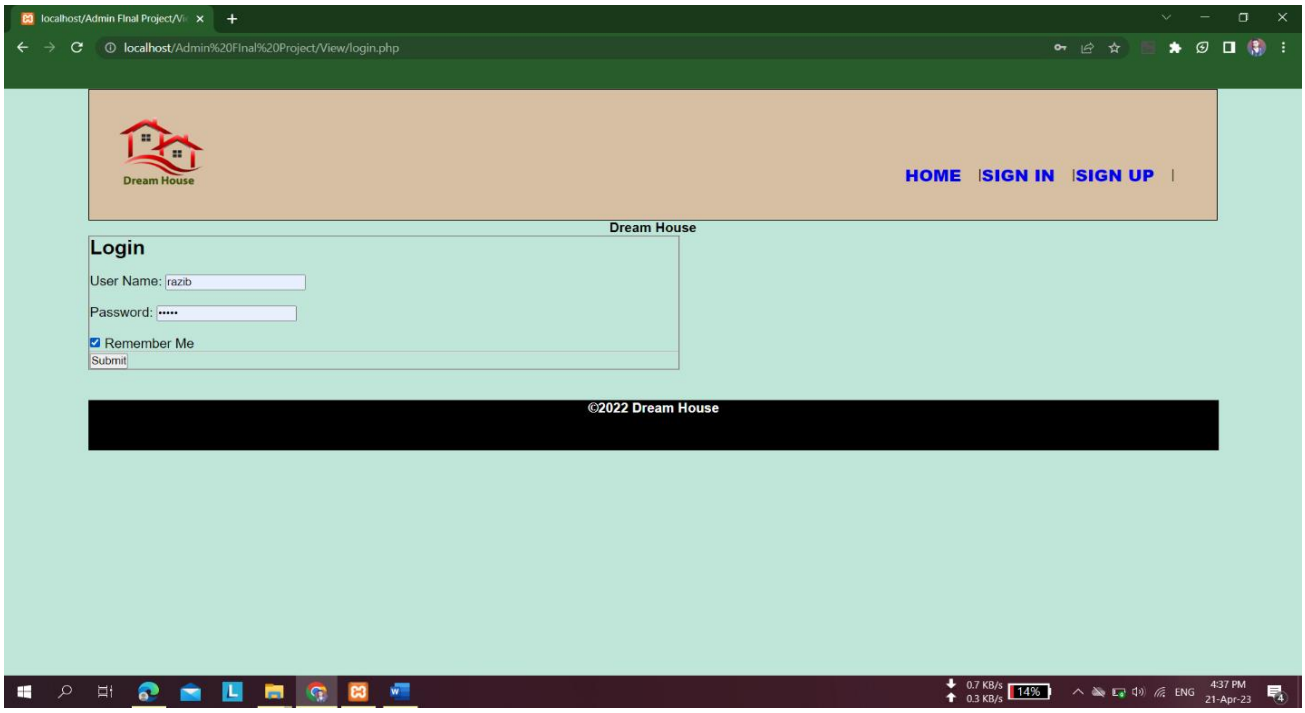
Cross-references: 4.2

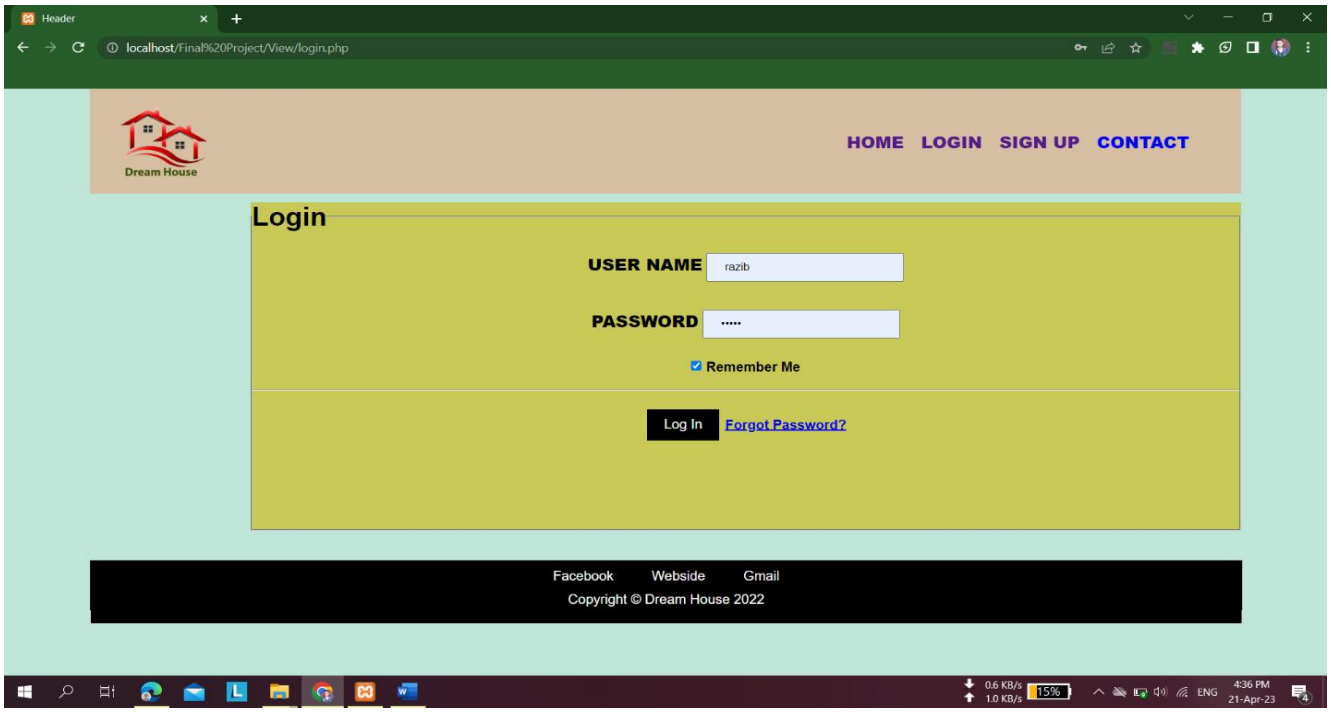
4.2 System Quality Attributes

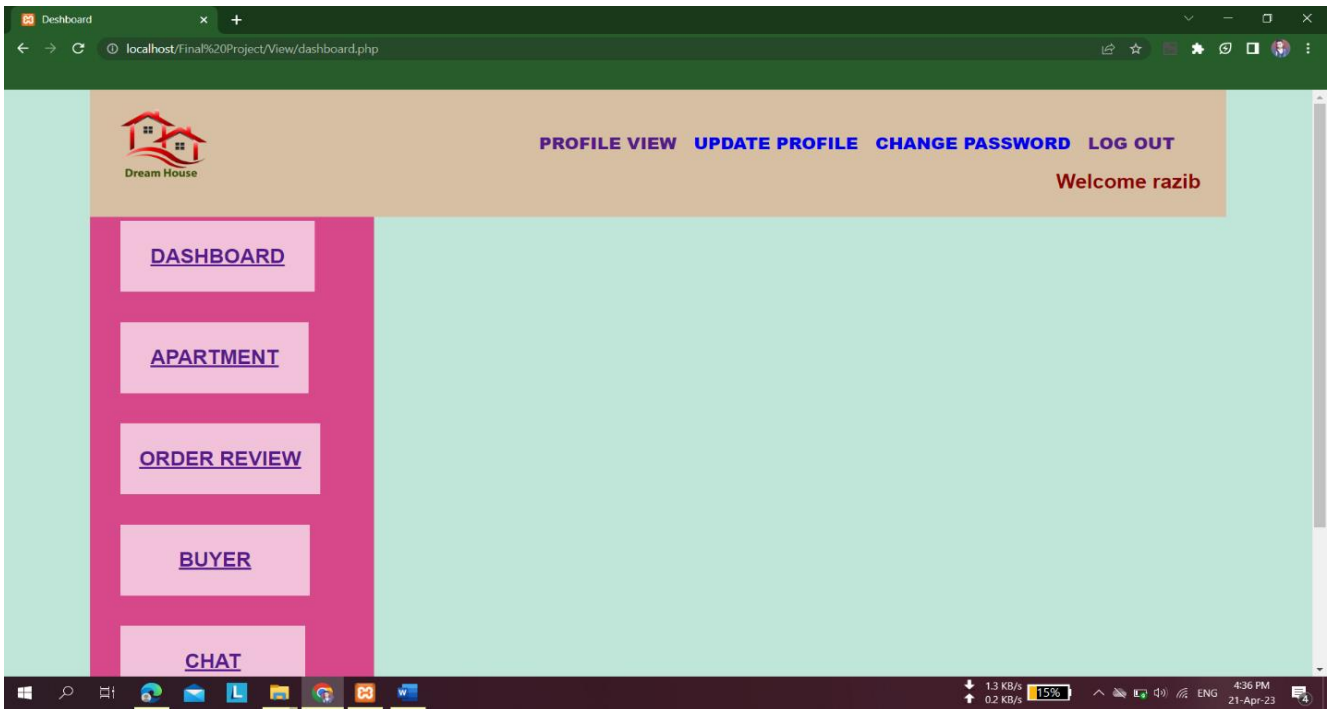
- **Usability:** Any skilled user should be able to register and login to the system.
- **Efficiency:** Each and every functional need must be fulfilled.
- **Portability:** This will be capable of running properly on all the devices.
- **Maintainability:** If any issue locates or detect in the system then it will be possible to fix it.
- **Correctness:** Mentioned all features will be completed according to the preferences of the patients.
- **Functionality:** Will display available slot list, their details and it will also show if they are parking or not.
- **Accessibility:** It's a web-based software so it will be accessible from anywhere on the Internet.
- **Readability:** It's critical to rely on appointment software to properly and containing accurate scheduling demands. It is so important to check to see if the system is durable enough to sustain any situation. So, regular counting on parking slot.
- **Reliability:** All features will perform in various working environments or devices. o Flexibility: Will flexible enough to modify in terms of any needs.
- **Integrity:** System integrity or security should be sufficient to prevent unauthorized access to system functions, information loss, and virus infection of software, as well as to protect the privacy of data entered into the system. Actually, Integrity comes with security.

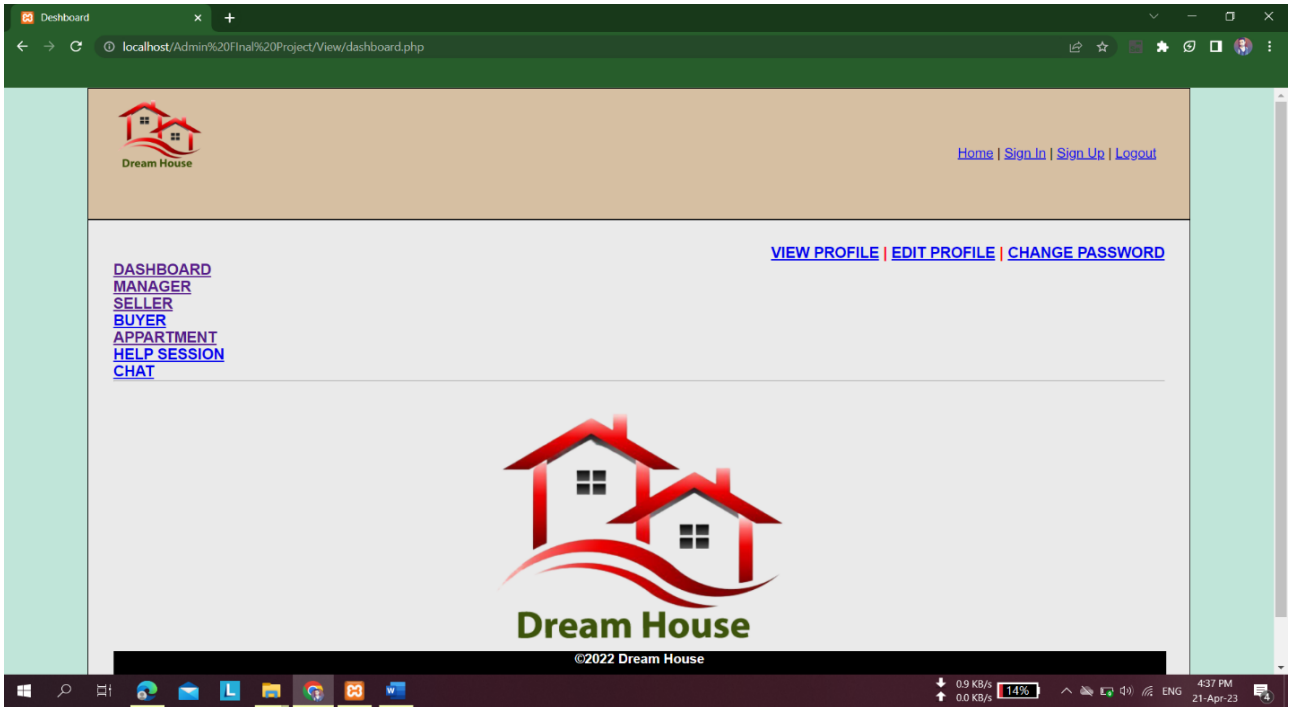
4.3 System Interface

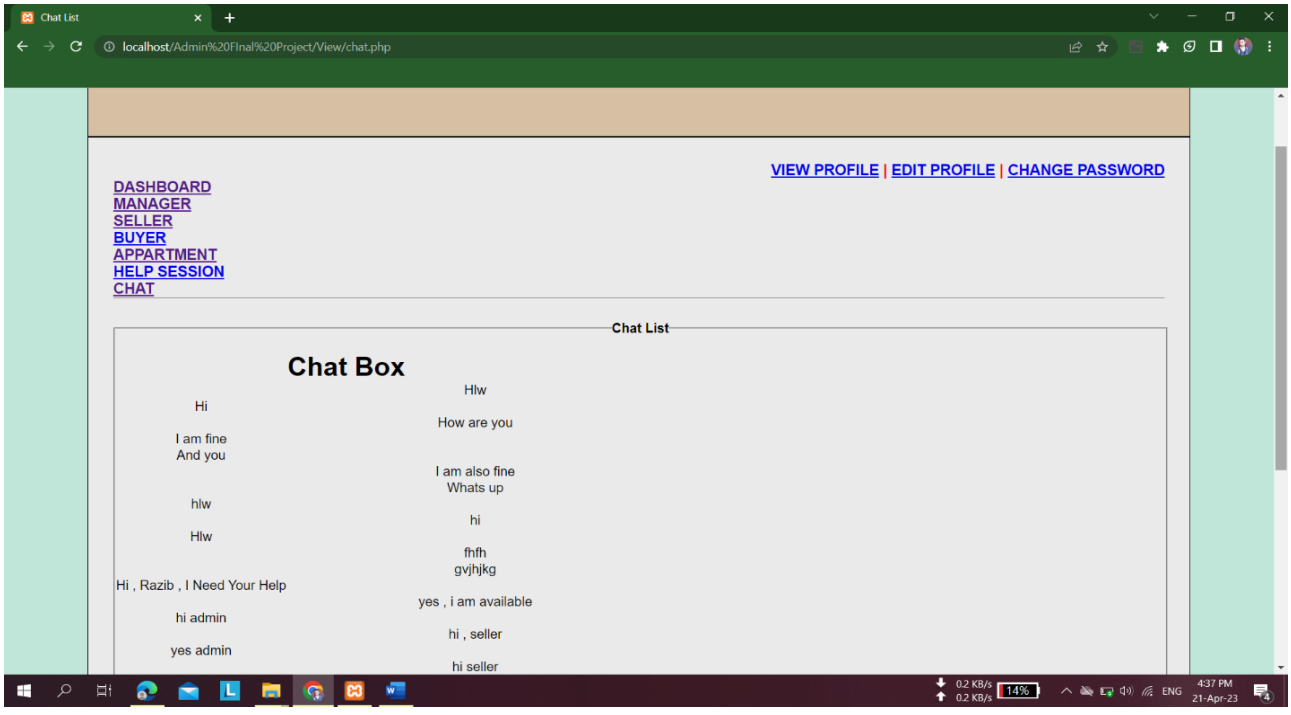





Header
localhost/Final%20Project/View/login.php
Dream House
HOME LOGIN SIGN UP CONTACT
Login
USER NAME
razib
PASSWORD
Remember Me
Log In
Forgot Password?
Facebook Webside Gmail
Copyright © Dream House 2022


Deshboard
localhost/Final%20Project/View/dashboard.php
Dream House
PROFILE VIEW UPDATE PROFILE CHANGE PASSWORD LOG OUT
Welcome razib
DASHBOARD
APARTMENT
ORDER REVIEW
BUYER
CHAT


Deshboard
localhost/Admin%20Final%20Project/View/dashboard.php
Dream House
Home | Sign In | Sign Up | Logout
VIEW PROFILE | EDIT PROFILE | CHANGE PASSWORD
DASHBOARD
MANAGER
SELLER
BUYER
APPARTMENT
HELP SESSION
CHAT
Dream House
©2022 Dream House


Chat List
localhost/Admin%20Final%20Project/View/chat.php
VIEW PROFILE | EDIT PROFILE | CHANGE PASSWORD
DASHBOARD
MANAGER
SELLER
BUYER
APPARTMENT
HELP SESSION
CHAT
Chat List
Chat Box
Hi
I am fine
And you
hlw
Hlw
Hi , Razib , I Need Your Help
hi admin
yes admin
Hlw
How are you
I am also fine
Whats up
hi
fhfh
gvjhjkg
yes , i am available
hi , seller
hi seller

4.4 Project Requirements

- Total budget 2,00,000
- Total Development Time 6 months
- In our application we will use PHP programming language we will use MySQL database in backend.
- Total size of our project must be 600-800MB.

5. FEATURES NOT TO BE TESTED

The following is a list of the areas that will not be specifically addressed. All testing in these areas will be indirect as a result of other testing efforts. For example:

- How to perform our application under low network that will not be tested.
- External functionality over the program is not supported by this system. As a result, application to server testing should be avoided.
- Hardware

6. TESTING APPROACH

6.1 Testing Levels

The testing for the online flat management system project will consist of Unit, System/Integration (combined) and Acceptance test levels. For system/integration testing, it is intended that there would be at least one independent test professional working full-time. However, due to financial limitations and fixed schedules, the test manager will conduct the majority of testing with input from the development teams.

- **Unit Test:** The fundamental level of testing is the unit test. After creating each feature, a developer will verify that it functions as intended inside the component design. Because they are the ones who understand how these specific features functioned and because they are familiar with internal logic, program structure, etc., developers will perform this testing. In our application, the developer will conduct UNIT testing, and the development team leader will provide their approval. Before unit testing is accepted and handed off to the tester, the programmer must show the team leader proof of it (test case list, sample output, data printouts, defect information). The test person will also receive access to all unit test data.

- **Integration Test:** The second level of testing is integration testing. the present level. The modules or features will be linked together one at a time. The leader of our development team will oversee this testing and determine whether or not the data transmission between these modules is accurate. At this level, we'll use strategies like the sandwich strategy, big bang approach, bottom-up integration, and top-down integration.

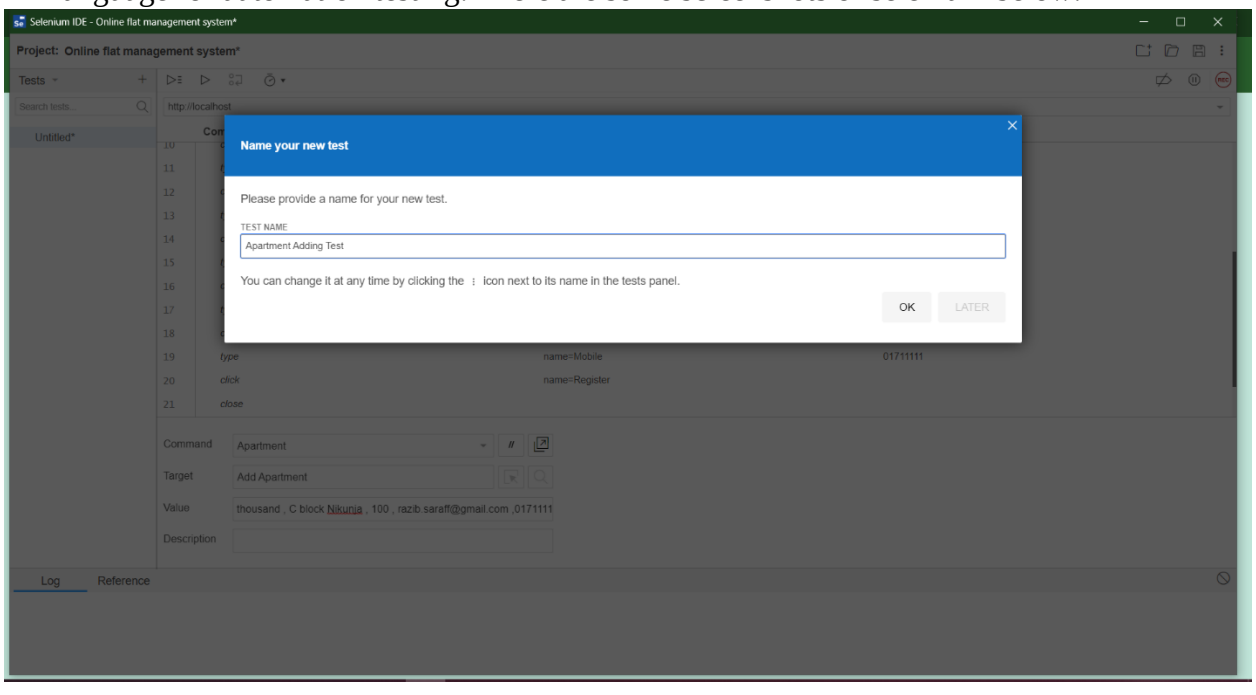
- **System Test:** Our quality assurance team will carry out this testing level once the unit test and integration test have been completed. Our quality team will check the complete system against the customer's specification once our full program has been developed. These testing methods are known as black boxes. Various testing methods will have been used at this testing level. In addition to performing functional testing, our testing team also performs nonfunctional testing such as volume, load, and performance testing.

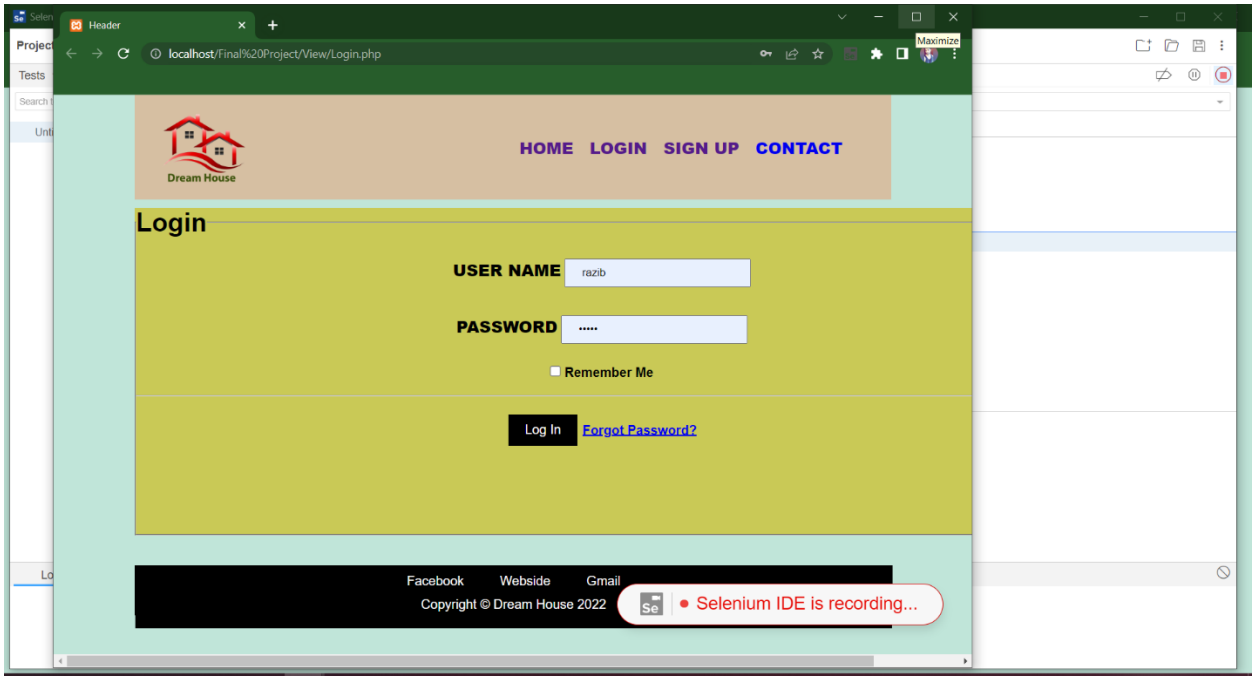
- **Acceptance Test:** We will move on to the acceptance testing level once our entire application has been completed and the first three levels have been tested. At this stage, the test team leader will work with the end user to evaluate our product. In essence, we will check the software's usability and functionality. We will ensure that our system satisfies all user requirements after this testing phase.

6.2 Test Tools

We used different kinds testing tools to test our application like Selenium.

o **Selenium:** We used selenium because of Automation testing. Our quality control engineer will conduct this testing part. First of all, we will do manual testing after manual part we will conductautomation testing. Selenium is a free and open-source framework for evaluating web applications across many browsers and platforms. Selenium Test Scripts created in a number of different programming languages, such as Java, C#, Python, and others. But we will use Java language for automation testing. There are some screenshots of selenium below:




Header
localhost/Final%20Project/View/Login.php
Maximize
Dream House
HOME LOGIN SIGN UP CONTACT
Login
USER NAME
razib
PASSWORD
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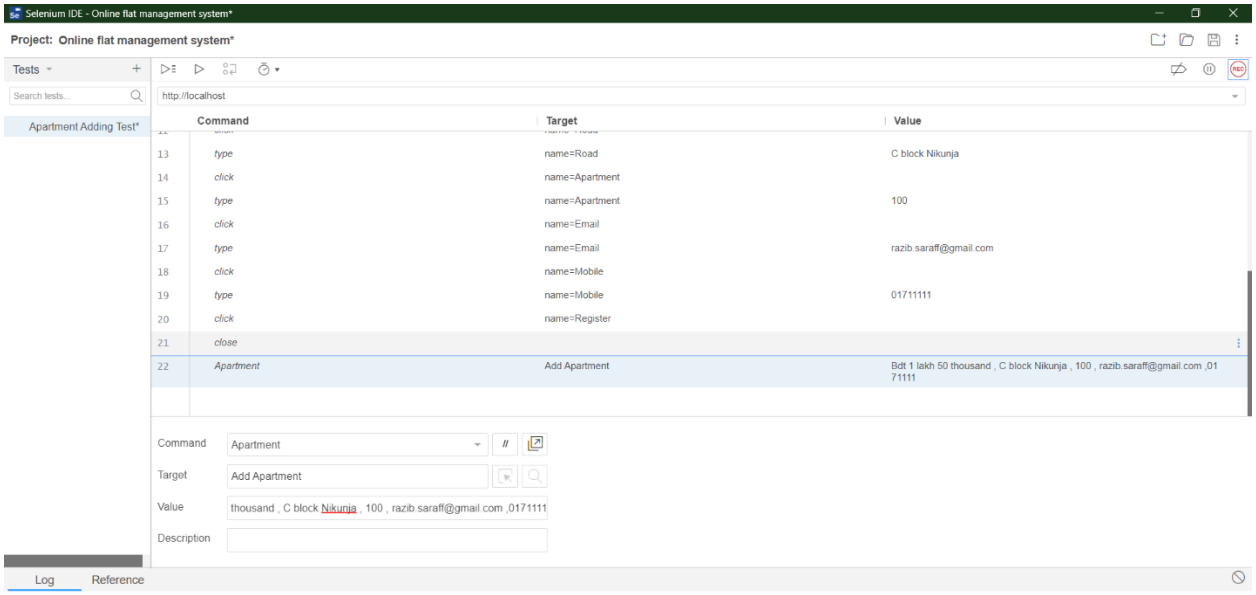
Remember Me
Log In
Forgot Password?
Facebook
Webside
Gmail
Copyright © Dream House 2022
Selenium IDE is recording...


Selenium IDE - Online flat management system*
Project: Online flat management system*
Tests
Search tests...
Apartment Adding Test*
http://localhost
Command
Target
Value
13 type name=Road C block Nikunja
14 click name=Apartment
15 type name=Apartment 100
16 click name=Email
17 type name=Email razib.saraff@gmail.com
18 click name=Mobile
19 type name=Mobile 01711111
20 click name=Register
21 close
22 Apartment Add Apartment Bdt 1 lakh 50 thousand , C block Nikunja , 100 , razib.saraff@gmail.com ,01 71111
Command Apartment
Target Add Apartment
Value thousand , C block Nikunja , 100 , razib.saraff@gmail.com ,0171111
Description
Log
Reference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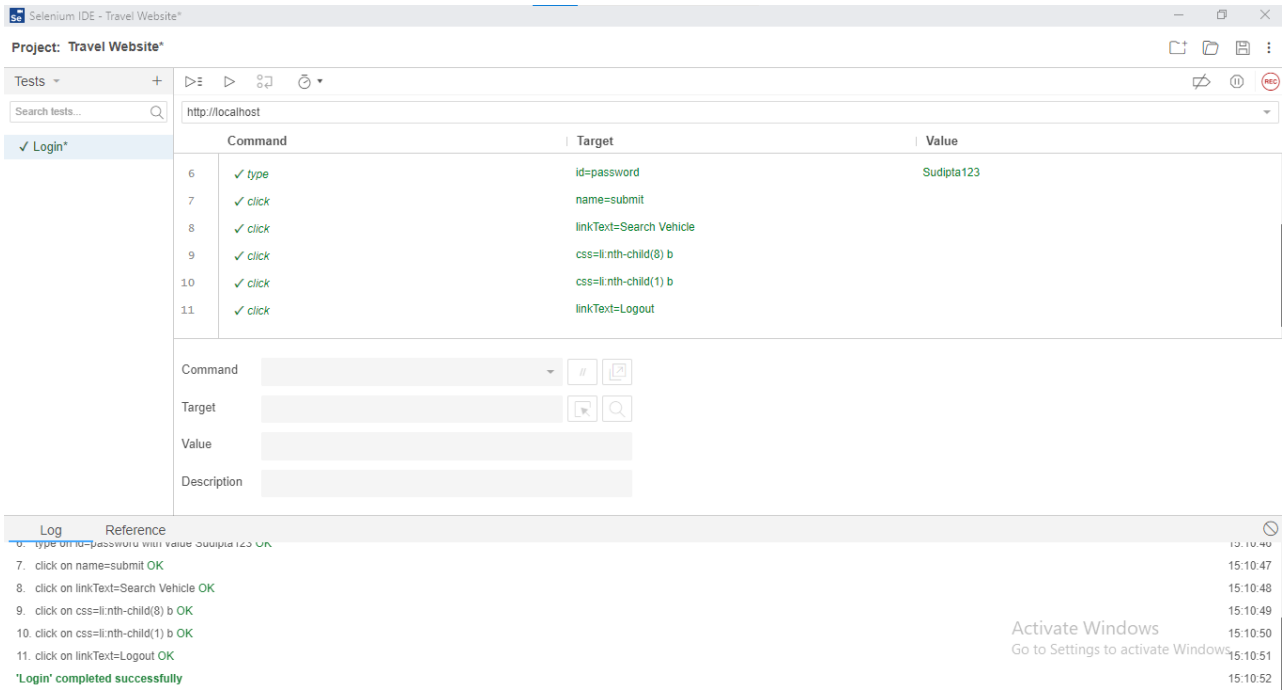
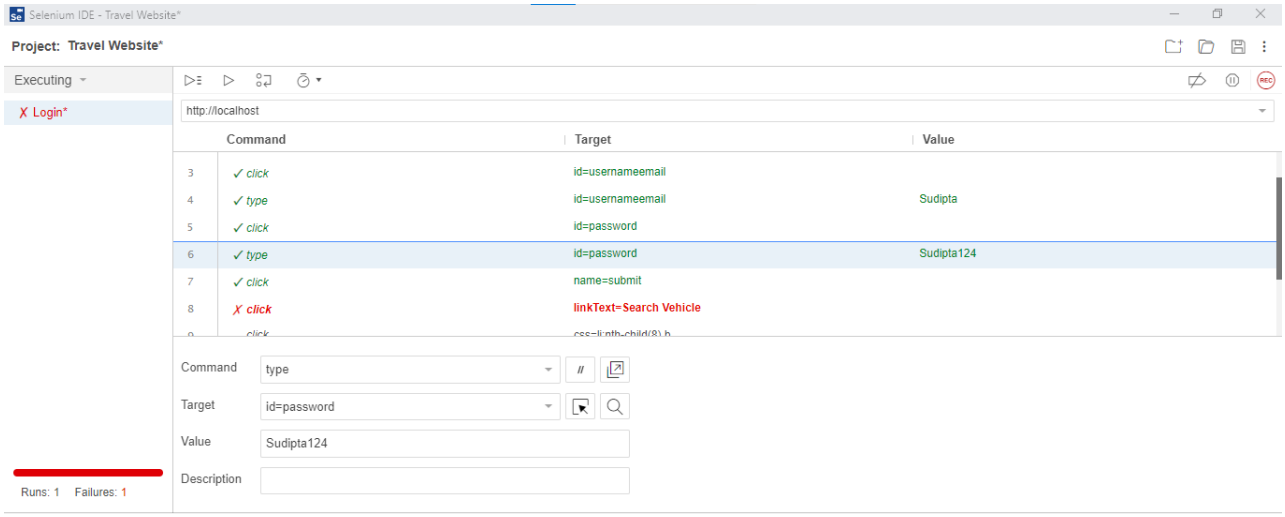
27-Apr-23





6.3 Meetings

Every week, the quality assurance team leader will set up a meeting to assess the progress being made onour application. We will also regularly perform code reviews and code walks through in order to find errors and bugs as soon as possible. Each week our project manager will meet with our quality assuranceteam lead to go over the status of our project. Every two weeks, all of our staff members who are involved in the project will participate in the inspection section.

7. TEST CASES/TEST ITEMS

Project Name: Online flat management system			**Test Designed by:** Razib Saraff	
Test Case ID: FR_1			**Test Designed date:** 26-4-2023	
Test Priority (Low, Medium, High): High			**Test Executed by:** Sudipta Saha	
Module Name: Registration Section			**Test Execution date:** 27-4-2023	
Test Title : Verify registration field providing credentials				
Description: Test website registration page				
Precondition: N/A				
Test Steps	**Test Data**	**Expected Results**	**Actual Results**	**Status (Pass/Fail)**
1. Go to the website 2. Registration section 3. Click register	Username: Razib Email: razib@gmail.com Password: razib123	User get the message "Registration Successful"	As expected	Pass
Post Condition:				

Project Name: Online flat management system			**Test Designed by:** Razib Saraff	
Test Case ID: FR_2			**Test Designed date:** 20-4-2023	
Test Priority (Low, Medium, High): High			**Test Executed by:** Umme Habiba	
Module Name: Registration Session			**Test Execution date:** 23-4-2023	
Test Title : Verify registration field providing credentials				
Description: Test website registration page				
Precondition: N/A				
Test Steps	**Test Data**	**Expected Results**	**Actual Results**	**Status (Pass/Fail)**
1. Go to the website 2. Registration section 3. Verify the input field. 4. Click register	N/A	Data display on input field	As expected	Pass
Post Condition: Post Condition followed				

Project Name: Online flat management system			**Test Designed by:** Sudipta Saha	
Test Case ID: FR_3			**Test Designed date:** 20-4-2023	
Test Priority (Low, Medium, High): High			**Test Executed by:** Razib Saraff	
Module Name: Login Session			**Test Execution date:** 24-4-2023	
Test Title : Validate Login Functionality				
Description: Test website login page				
Precondition: Have to register first				
Test Steps	**Test Data**	**Expected Results**	**Actual Results**	**Status (Pass/Fail)**
1. Go to the website 2. Login section 3. Put data 4. Click login	Username:-Razib Password:-razib123	Re-direct to Seller Panel	As expected	Pass
Post Condition: Validate user data with database				

Project Name: Online flat management system			**Test Designed by:** Umme Habiba	
Test Case ID: FR_4			**Test Designed date:** 18-4-2023	
Test Priority (Low, Medium, High): High			**Test Executed by:** Razib Saraff	
Module Name: Apartment			**Test Execution date:** 27-4-2023	
Test Title : Adding Apartment				
Description: Test adding apartment section in apartment list				
Precondition: have to login first with valid username and password				
Test Steps	**Test Data**	**Expected Results**	**Actual Results**	**Status (Pass/Fail)**
1. Go to the website 2. Login section 3. Go to apartment list 4. Add apartment	Username:-Razib Password:-razib	Apartment will be added to the list	As expected	Pass
Post Condition: N/A				

Project Name: Online flat management system			**Test Designed by:** Razib Saraff	
Test Case ID: FR_5			**Test Designed date:** 15-4-2023	
Test Priority (Low, Medium, High): High			**Test Executed by:** Razib Saraff	
Module Name: Chat Session			**Test Execution date:** 25-4-2023	
Test Title : Check Chat Function				
Description: Test admin and seller can have chat in between them				
Precondition: have to login first				
Test Steps	**Test Data**	**Expected Results**	**Actual Results**	**Status (Pass/Fail)**
1. Go to website 2. 2.Login 3. Go to chat 4. Chat 5. Type Message and send	Username:-razib Password:-razib	The admin panel will be able to see the message	As Expected	Pass
Post Condition: N/A				

8. ITEM PASS/FAIL CRITERIA

- Unit test done in each and every module or feature
- All the modules added one by one and integration test done after every module integrated
- 100% integration test passed
- No major defects are outstanding
- Not more than 15 minor defects are outstanding
- Code coverage tools indicates all code covered
- Ensuring all critical Test Cases are passed
- Identifying and fixing all the high-priority defects

9. TEST DELIVERABLES

The Software Quality and Testing Plan defines the technical and managerial processes necessary for thesystem's development and delivery.

- First, an acceptance test plan, which functions as a contract between our project and the creators of the project to be published.

- Then we'll need a system integration strategy. Because system integration is described as a process, we may utilize it to connect various computer systems or software applications to a single, bigger system, allowing each solution to work functionally together.

- In the unit test strategy part, we must assess the system that will be tested.

- Screen prototypes are made up of many papers. That single prototype is a redesigned Iterative Prototyping. Iterative prototyping entails developing a prototype based on the product design, evaluating it for usability and functioning, and then modifying what didn't work. Following the completion of testing, the research team will develop and produce a fresh version for testing.

- Mockup reports provide a framework for entering and copying graphics, as well as the opportunity to experiment with different formats of charts, graphs, and illustrations and arrange them in such a way that the reader does not have to switch back and forth in the report to match acopy of the exemplary artwork.

- Here are discussed the design goals, high-level system decomposition, concurrency identification, hardware and software platforms, acceptance test plan, system integration plan, screen prototypes, software control implementation, and report mock ups. Incident reports are critical for employee safety and developing best practices in the workplace. Proper incident documentation contributes to the success of a project. We created a report and a complete explanation of our project in our project. A test manual that details the unit and system tests performed on the system prior to delivery, as well as the expected results.

- The test log records events that occurred during a test run or planned run, as well as the status of each checkpoint. In our project, we updated each checkpoint and collected data on our activities and methods. An employee turnover report is a summary of the number of dismissed workers among current employees in a company. It is the monthly analysis report, which is generated monthly, and the average for the year is determined. As a result, it is critical to our initiatives and plays a vital role.

10. STAFFING AND TRAINING NEEDS

The goal of the staffing technique is to guarantee that the project has enough people with the necessary skills and expertise to complete it successfully. The following is a detailed overview of the duties required to complete the project. It details the project's roles, their responsibilities, the number of people needed to complete each position.

- It is clearly notified that, there will be minimum one or two project manager who are expert in organizing, planning, and executing projects while working within constraints such as budgets and schedules.

- In our project we need at least one full-time tester assigned to the system / integration and acceptance testing phase of the project. Approximately four months after the start of the project, (full time tester) will be assigned full-time. If there is no tester, the test manager will assume thisrole. To ensure a complete and proper exam, we need to address some areas related to training.

- In our project, we hired lead programmers. Lead programmers are software engineers who oversee several projects. At the technical level, he is responsible for overseeing projects, technical decisions, and developer work. At the management level, he is responsible for achieving goals and meeting deadlines.

- Developers and testers need to be trained in the basic features of the EDI interface. Operations staff must also be well trained in the EDI communication process before the project is finally approved.

- Analyze project requirements, determine how to translate a designer's vision into a plan that developers can implement. By involving a requirement analyst in our project, we can do these types of works. o Monitoring and controlling mechanism play a vital role of project objectives. If the project is well budgeted and all perspectives of the project are running, the project will work properly. Testing strategy and objectives in our project, we identified the purpose of our testing. Also observed what a successful completion of a testing cycle looks.

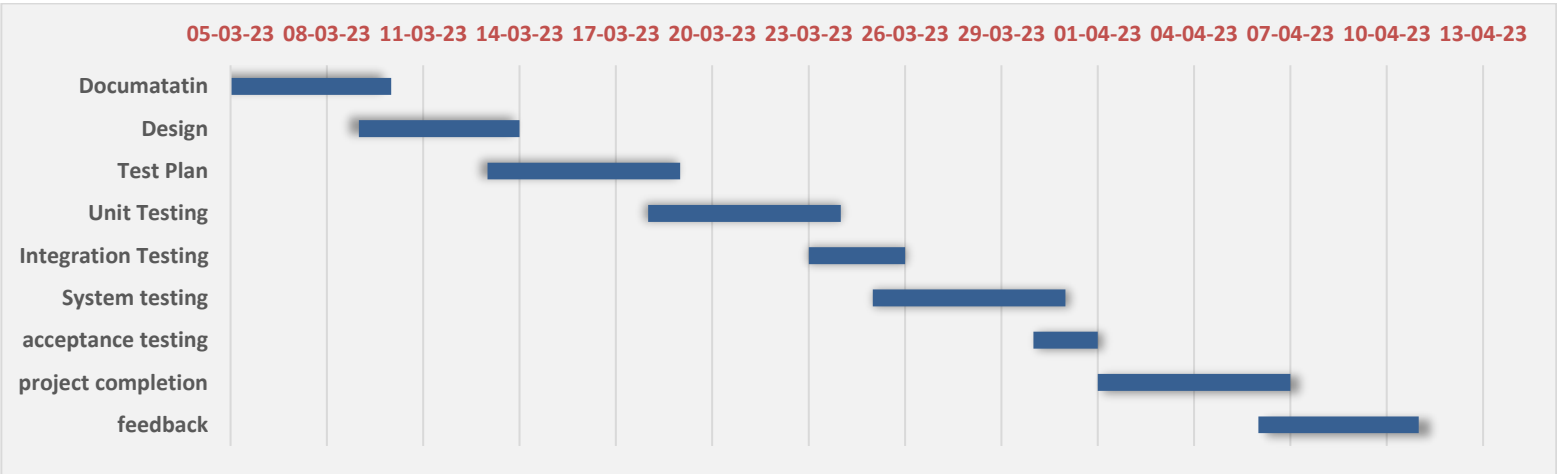
- Development management and user management are closer. The user administrator decides where to go, taking into account changes in the control process. So, in our project when development management system needed help to improve the project, they can discuss with usermanagement team.

11. RESPONSIBILITIES

	TM	PM	Dev Team	Test Team	Client
Acceptance test Documentation & Execution	X	X		X	X
System/Integration test Documentation & Exec.	X		X	X	
Unit test documentation & execution	X		X	X	
System Design Reviews	X	X	X	X	X
Detail Design Reviews	X	X	X	X	
Test procedures and rules	X	X	X	X	
Screen & Report prototype reviews			X	X	X
Change Control and regression testing	X	X	X	X	X

12. TESTING SCHEDULE

Time has been allocated within the project plan for the following testing activities. The specific dates and times for each activity are defined in the project plan timeline. The persons required for each process are detailed in the project timeline and plan as well. Coordination of the personnel required for each task, test team,development team, management and customer will be handled by the project manager in conjunction with the development and test team leaders. Schedule must be done using any PM tool.



5. PLANNING RISKS AND CONTINGENCIES

- Limited Reassigned Sales staff. The Reassigned Sales administration staff currently has two positions unfilled. As a result of this staff shortage there may be delays in getting staff to review appropriate documents and to participate in the Acceptance test process. Should clientstaff become a problem, the appropriate dates for reviews and acceptance testing will slip accordingly. No attempt will be made to bypass any part of the review and testing processes.

6. APROVALS

Project Sponsor - Steve Sponsor	
Development Management - Ron Manager	
EDI Project Manager - Peggy Project	
RS Test Manager - Dale Tester	
RS Development Team Manager - Dale Tester	
Reassigned Sales - Cathy Sales	
Order Entry EDI Team Manager - Julie Order	