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

Section: E
Software Quality Assurance and Testing

Cine the OTT Platform

A Report submitted
By

SN	Student Name	Student ID
1	Hossen, Sanuar	19-39559-1
2	Lokman Hossain Sharif	19-39579-1
3	Sijan Shariar Annanto	19-39587-1
4	Hasan Sanjary Islam	19-39589-1

Under the supervision of

Farzana Bente Alam
Lecturer, Faculty, Computer Science
Faculty Of Science & Technology

Software Test Plan

for

<CINE The OTT Platform>

Version 1.0 approved

Prepared by

Hossen, Sanuar

Lokman Hossain Sharif

Sijan Shariar Annanto

Hasan Sanjary Islam

American International University-Bangladesh

10 December, 2022

Table of Contents

Revision History

Revision	Date	Updated by	Update Comments
0.1	2022.12.04	Hossen, Sanuar	First Draft
0.2	2022.12.04	Lokman Hossain Sharif	Second Draft
0.3	2022.12.04	Sijan Shariar Annanto	Third Draft
0.4	2022.12.04	Hasan Sanjary Islam	Forth Draft
0.5	2022.12.04	Hossen, Sanuar	Fifth Draft
0.6	2022.12.04	Lokman Hossain Sharif	Sixth Draft
0.7	2022.12.04	Sijan Shariar Annanto	Seventh Draft
0.8	2022.12.04	Hasan Sanjary Islam	Eighth Draft
0.9	2022.12.04	Hossen, Sanuar	Ninth Draft

1. TEST PLAN IDENTIFIER:RS-MTP01.3

2. REFERENCES

- Software Quality and Testing Course PowerPoint Slides
- Software Requirement documentation
- Software Requirements Specification (SRS) Document
- What is Postman Automation? – GeeksforGeeks
- https://www.w3schools.com/

3. INTRODUCTION

Background to the Problem

On September 7, 1927, the first successful demonstration of electronic television took place. It had been the principal means of amusement up until that point. This television was updated daily. We originally watched television in black and white, and then color television gradually became available. At the time, there was only one channel available. After that, numerous channels began to appear gradually, safelight was created, and we were able to start watching overseas channels as well. All of this provided us with a lot of entertainment, but this television still has problems that we were unable to fix. During every broadcast on this channel, there are numerous TVCs and advertisements. This situation is quite annoying. In addition, there is no freedom on these TV shows. Every channel seems to broadcast the same tale in its own dialect. Additionally, purchasing a TV could be costly. Children watch TV more often than they play or learn. In addition, certain dramas and films actively promote violence and sexual activity in young people.

Solution to the Problem

On our OTT platform, we can find a variety of movies, series, dramas, and cartoons under one origin. We could access all material on this platform without seeing any advertisements. Additionally, if we pay a minimal amount as a subscription fee, we can watch premium series as soon as they are released. CINE is a subscription-based streaming service that allows our members to watch TV shows and movies on an internet-connected device. Depending on your plan, you can also download TV shows and movies to your iOS, Android, or Windows device and watch without an internet connection. If you're already a member and would like to learn more about using CINE, visit Getting started with CINE.

4. REQUEIREMNT SPECIFICATION

4.1 System Features

1. Admin

1.1. Login/ Registration/ Requires validation
1.2. Verify Production House Account
1.3. Restrict Free/Premium user
1.4. Report generate statistics
1.5. Delete rules violating contents
1.6. See reports from all users
1.7. See users payment history
1.8. Suspend premium user and production house for payment reason

2. Production House

2.1. Profile CURD
2.2. Payment'
2.3. Upload Content
2.4. Download/View statistic report
2.5. Select free or premium
2.6. Log in/Registration/Admin verify
2.7. Create playlist for series

3. Premium User

3.1. Profile CRUD
3.2. login/ Registration
3.3. Payment / Payment Reminder
3.4. Listing contents according to location
3.5. Authenticated to premium contents
3.6. Searching/Autocomplete search
3.7. Add to watch list
3.8. Liked / Disliked
3.9. Report and Rating
3.10. OTP download content

4. Free User

4.1. Basic CRUD

4.2. Log in/Registration
4.3. Profile CRUD
4.4. View History
4.5. Searching/Category Search/Auto Complete
4.6. Can only view free contents
4.7. Add to watch later list
4.8. Liked/Disliked contents
4.9. Option to go premium
4.10. OTP

4.2 System Quality Attributes

- ***Usability:***
  Since these systems' main stakeholders are everyone, as everyone can use it and benefit from it, the application has to be user-friendly. As there can be many users for this system.This system's features are easy to learn and navigate. New or infrequent users can easily learn to use this system.

- **RELIABILITY AND CORRECTNESS:**
  Complete testing is needed to make the software completely bug-free, but completing it is impossible as it takes a lot of time. But our software can give output as the user wants. The system's correctness has been ensured. Because it has been tested several times where no false output has been generated, and security has been guaranteed so is reliable to day-to-day use for the users.

- **MODULARITY:**
  For the system development, we have followed MVC (model view controller) format as this system was developed module-wise. We have implemented this format so that we can easily detect bugs. With this, if we find bugs in any module, we can fix them without having any problems with other modules. Which made testing easier. Also, we can add new features easily to our system as it was developed module wise.

- **MAINTAINABILITY:**
  Maintainability means the efficiency of the maintenance team and how easily they can perform their task. This task is to solve found bugs, add new or make changes to the old feature. And as the software was developed based on the module, the team can modify it in less or equal time during the development period.

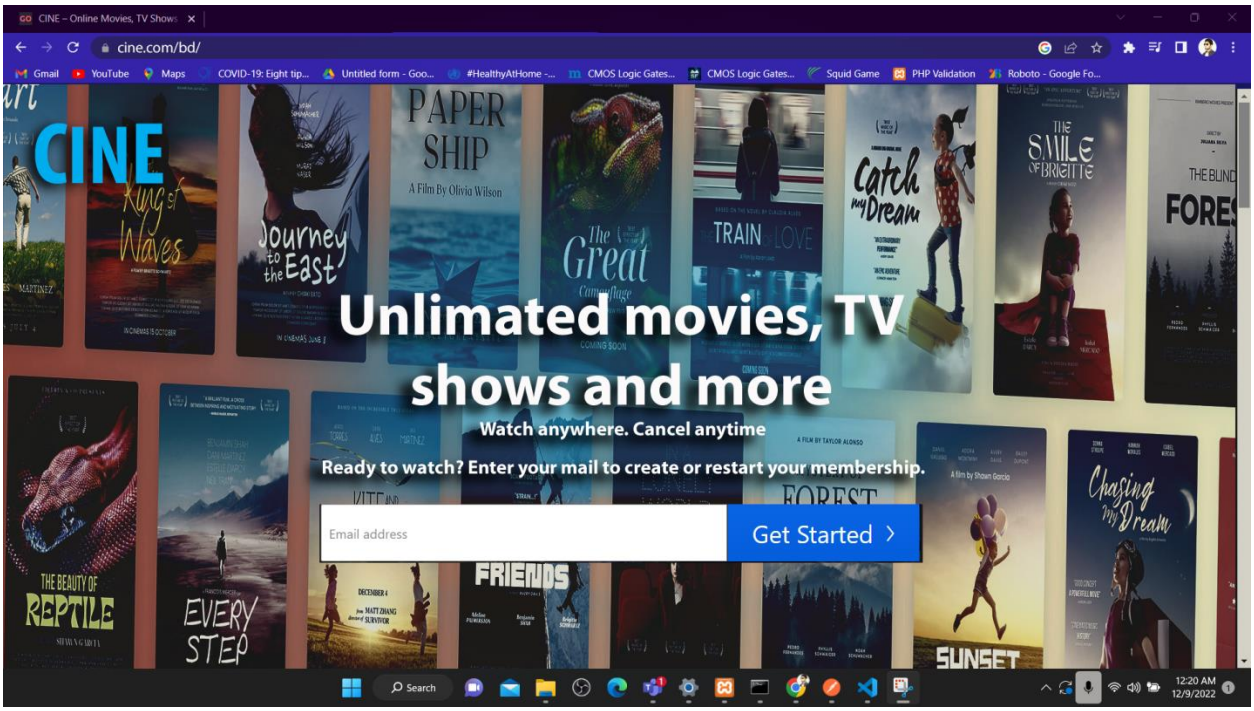
- **EFFICIENCY:**
  Efficiency is one of the major system quality attributes. It is measured in terms of the time required to complete any task given to the system. We have tried to make this application have a

large scale in efficiency because end users will widely use this. As the maximum stakeholders are customers, efficiency was the main priority.

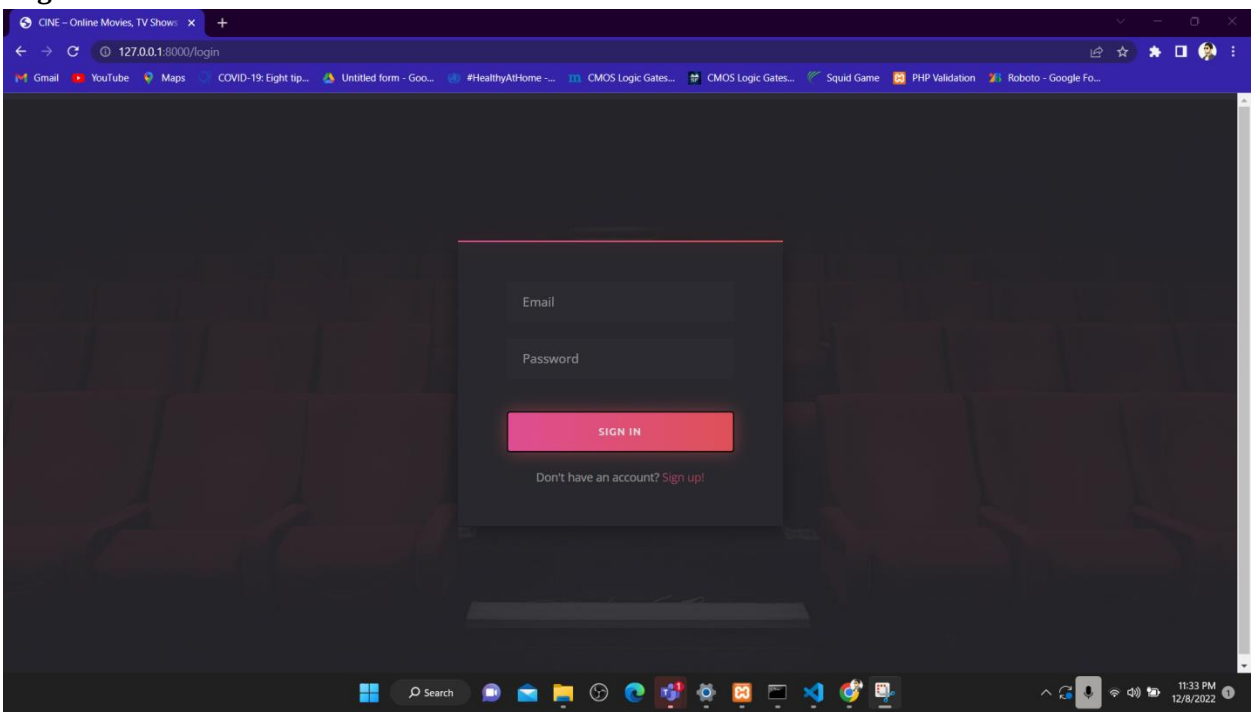
- **TESTABILITY:**
  Testability means how easily the testing team can perform their task. Testability depends on modularity, and our system is developed following the MVC format, which is modulewise, so that the tester can test every module easily. The module-based project helps the testers to fix modules individually, not going through every module to fix bugs.

4.3 System Interface

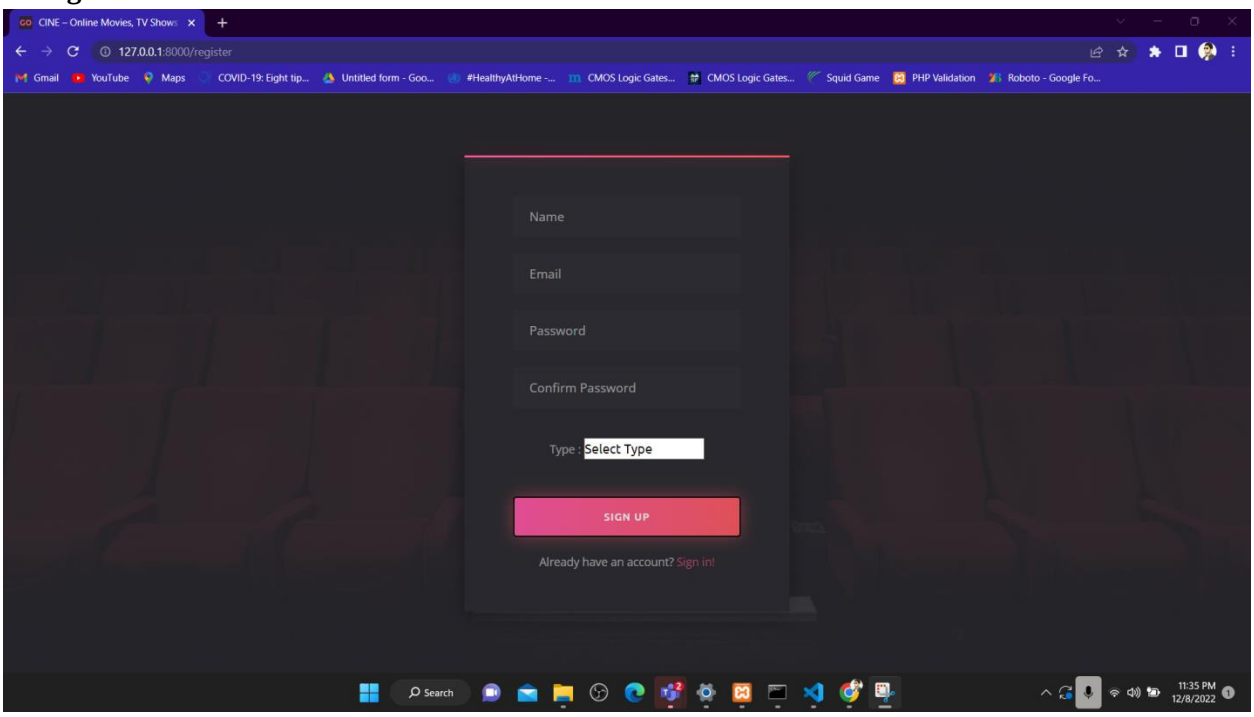
1. **Home interface:**



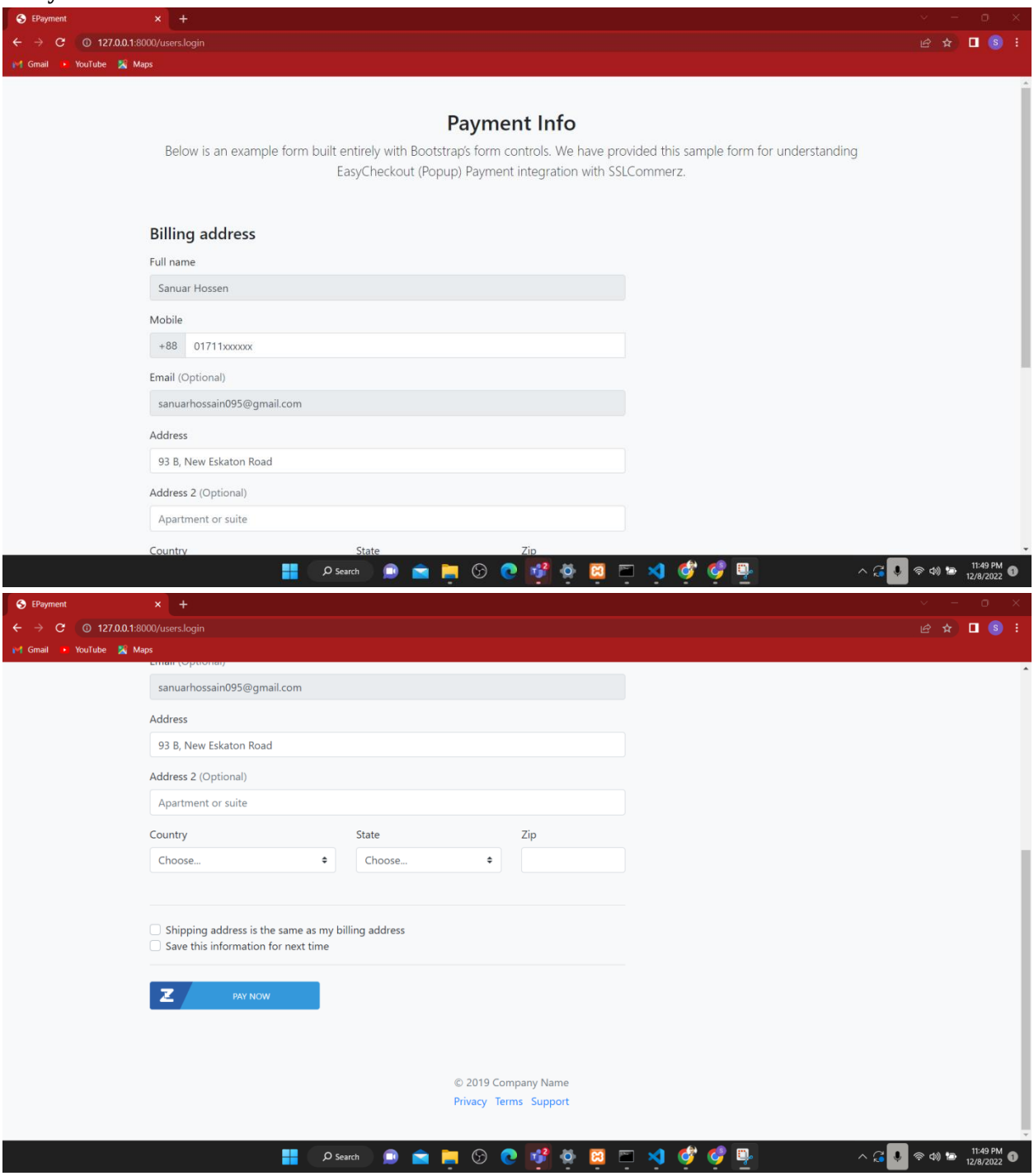
2. Log in interface:



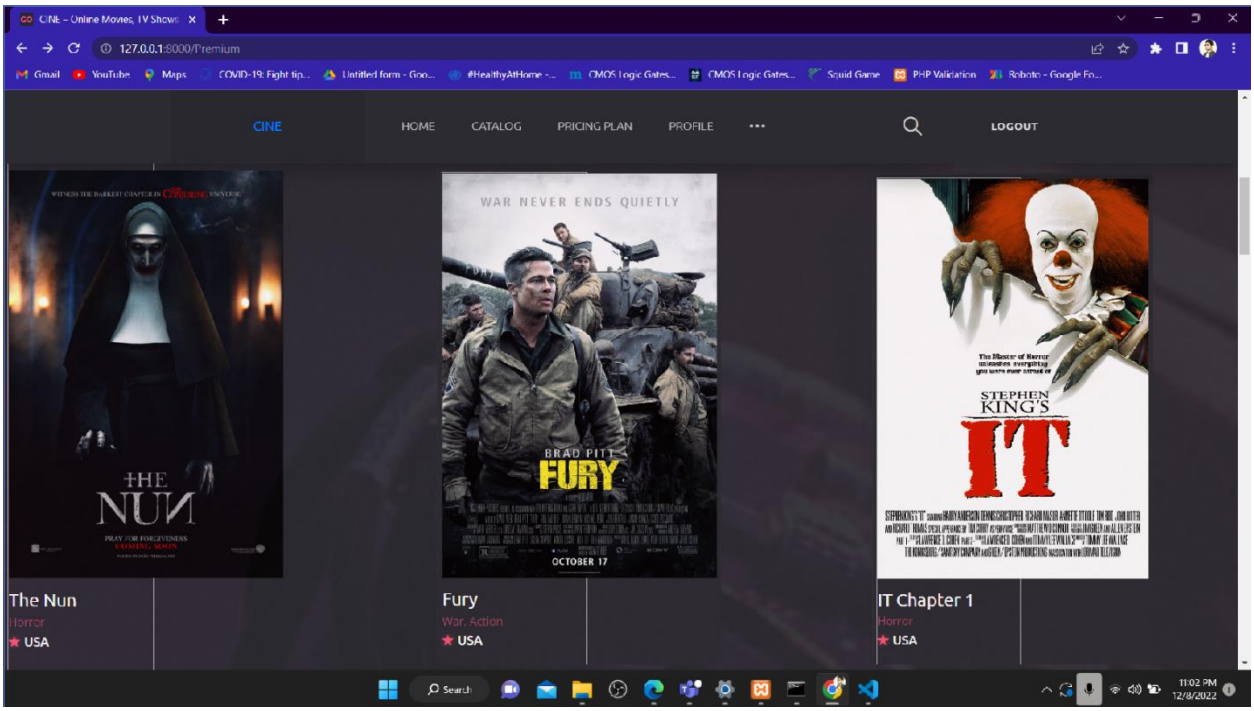
3. Registration interface:

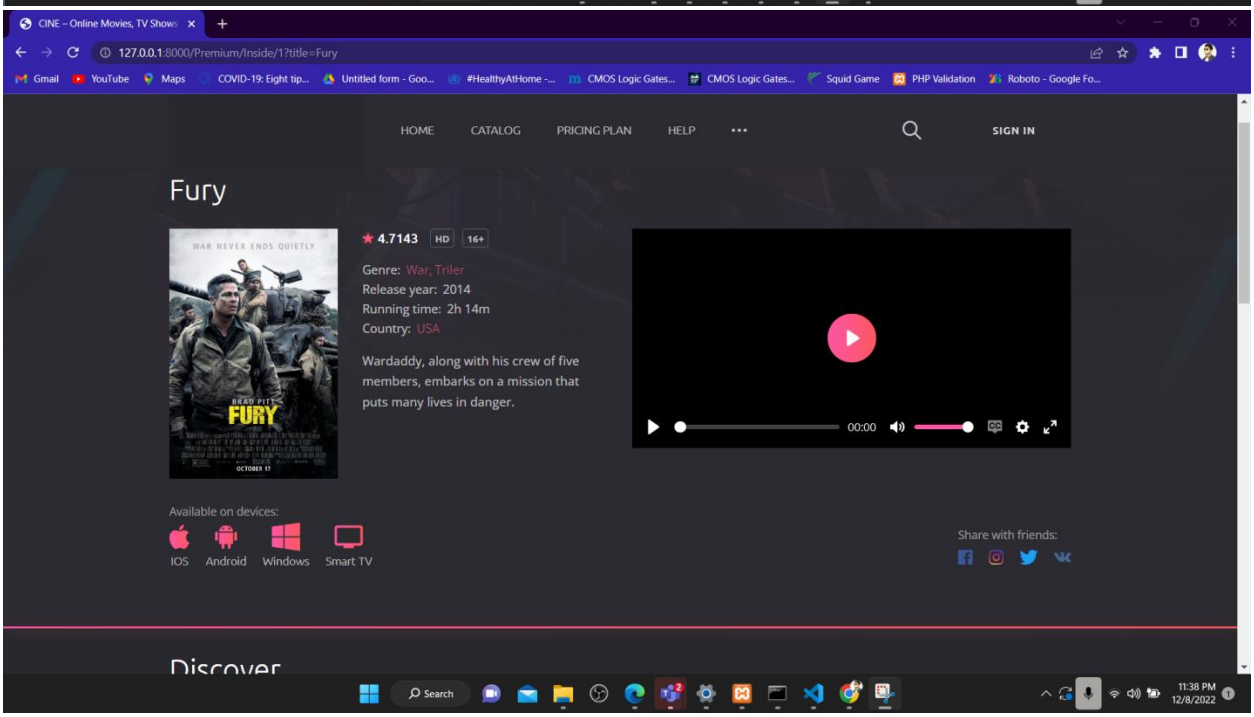


4.Payment interface:

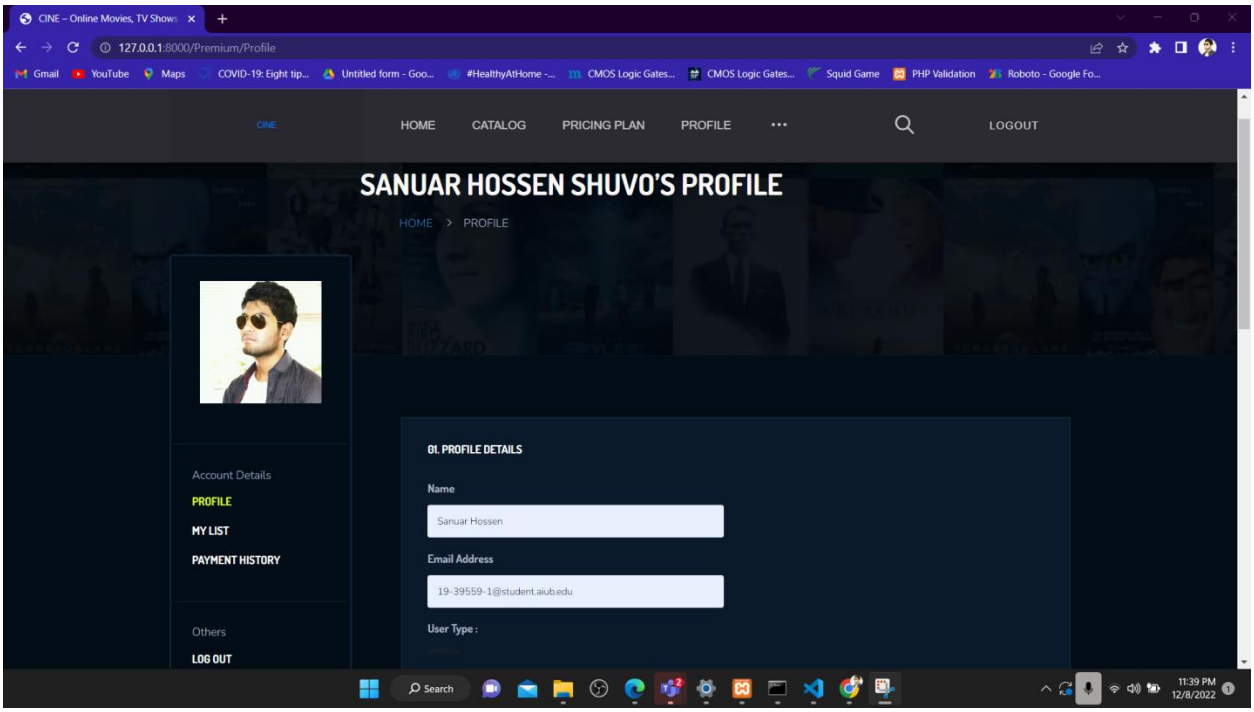


5.Premium dash board interface:





6.Profile interface:



4.4 Project Requirements

Effort Estimation:

Our project is to develop an application named "CINE the OTT Platform".
Development Time = 2 Months
Required number of peoples = 5

Budget Estimation:

Duration in weeks = 2*4 = 8 weeks
Office days = 5 days
Working hours = 8 Hours
Per week working hours is = (5*8) hours
= 40 hours
Total Working hours is = (40*8) hours
= 320 hours.
Developer salary per hour = 6 $
Total developers Salary = (6*320*5) $
= 9600 $

Expanse	Amount	Total Amount
Salary for 5 developers		9600 $
3 months office rent	3* 100 $	300 $
Electricity and other costs		200 $
Travel Cost		60 $
Total Cost		10160 $
15% of total cost(profit)		1524 $
Now total budget is		11684 $

5. FEATURES NOT TO BE TESTED

The following is a list of the areas that will not be specifically addressed or omitted completely,

- **OTP Generated**: As it is generated automatically OTP Code and sent it to the users mail. This feature was skipped due to time constraints.
  .

6. TESTING APPROACH

- **Unit Testing:**

  Testing can be divided into different types, and unit testing is one of them. And for software, it is best to do the unit testing first. In this testing, we will test individual software units or components. The main focus is to ensure each unit or module of the code works properly. The programmer in the development phase mainly does this testing. The white box testing process is used in unit testing. For unit testing, each module for the system will be tested individually. So, the system functions i.e., Admin, Production House, Premium User and Free User will be tested individually.

- **Integration Testing:**

  After unit testing, we will do the Integration testing. In this section, we will merge the small units and ensure that all the software modules are integrated properly and tested as a group. Our project is made up of several software modules written by Five programmers. The goal of this level of testing is to find flaws in the way various software modules interact when they're integrated. The Bottom-up Integration technique is used for integration testing.

- **System Testing:**

  System testing is when we merge every module, add every feature, create a full system, and then perform testing. In this section, verification of software requirements is made. We checked every

functionality and requirement. In this stage, Black box testing is done as white box testing is done when the project is in a module state.

• Acceptance Testing:

The finishing stage of software testing is acceptance testing, where end users will check it. As the time was short for this project, the development team acted like end-users and tested every feature and functional section of the software.

6.1 Testing Levels

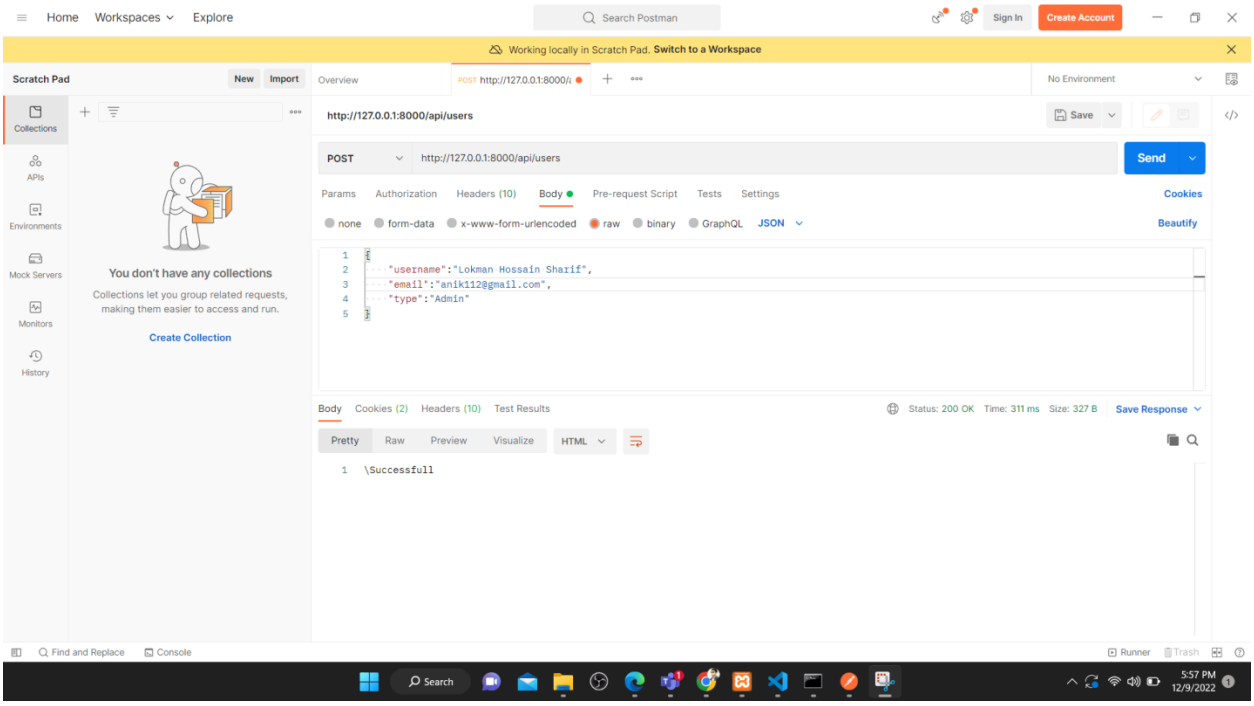
The testing for the CINE the OTT Platform will consist of Unit, System/Integration (combined) and Acceptance test levels. It is hoped that there will be at least one full time independent test person for system/integration testing. However, with the budget constraints and timeline established; most testing will be done by the test manager with the development teams' participation.

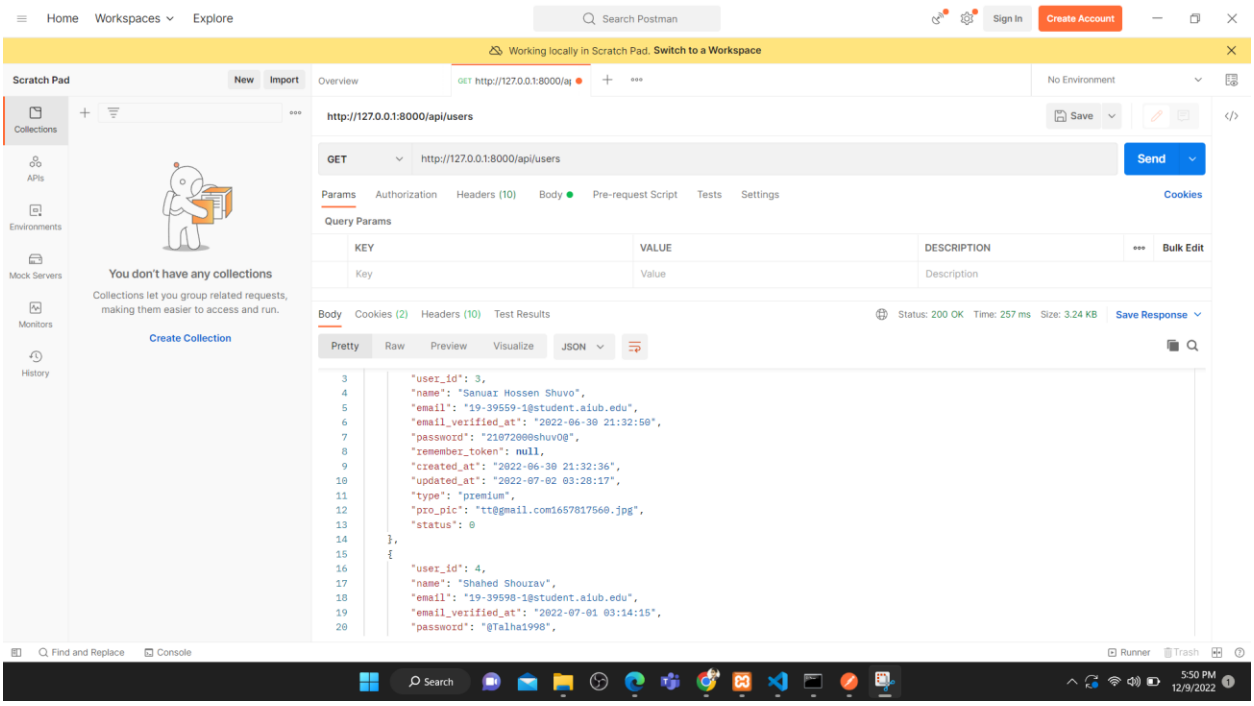
• UNIT Testing will be done by the developer and will be approved by the development team leader. Proof of unit testing (test case list, sample output, data printouts, defect information) must be provided by the programmer to the team leader before unit testing will be accepted and passed on to the test person. All unit test information will also be provided to the test person.

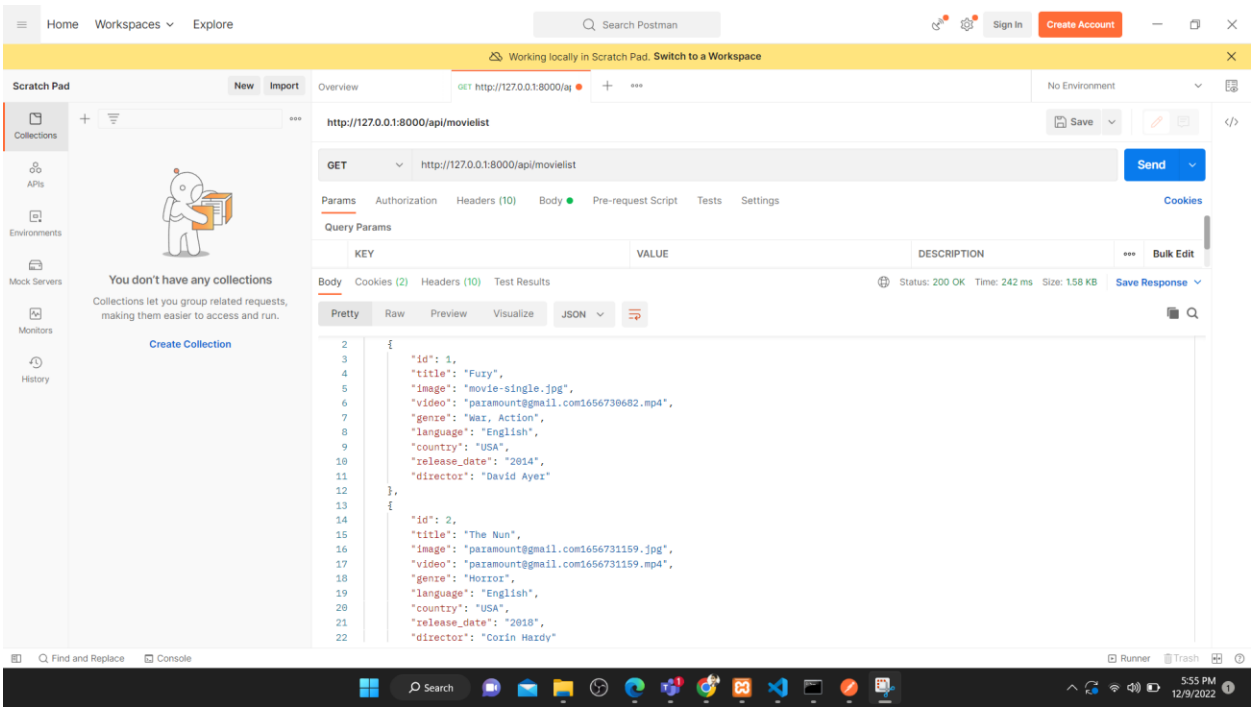
• SYSTEM/INTEGRATION Testing will be performed by the test manager and development team leader with assistance from the individual developers as required. No specific test tools are available for this project. Programs will enter into System/Integration test after all critical defects have been corrected. A program may have up to two Major defects as long as they do not impede testing of the program (I.E. there is a work around for the error).

• ACCEPTANCE Testing will be performed by the actual end users with the assistance of the test manager and development team leader. The acceptance test will be done in parallel with the existing manual ZIP/FAX process for a period of one month after completion of the System/Integration test process.

6.2 Test Tools







6.3 Meetings

One of the main factors of a successful testing team is distributing the work into equal parts and assigning them to the proper person. To be a successful team doing regular meetings is very important. So, the test team will meet once every week to evaluate the progress of each member, whether they have done their assigned work or not. And check whether they are facing any problems. If they face any issues, the other team members will help them and try to solve them as early as possible. The testing team leader will meet the development and project manager once every two weeks. And an extra meeting will be arranged if there is any emergency.

7. TEST CASES/TEST ITEMS

7.1 Home page

This test case tests the home page of the website verifying if every navigation is functional

Project Name: CINE the OTT Platform			Test Designed by: Sanuar Hossain	
Test Case ID: Home_1			Test Designed date: 08-11-2022	
Test Priority (Low, Medium, High): Medium			Test Executed by: Sanuar Hossain	
Module Name: Log in			Test Execution date: 10-11-2022	
Test Title: Verifying navigation bar				
Description: Test the website navigation bar if it's navigating properly to other pages				
Precondition (If any): Proper internet connection				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website. 2. Click the "Admin" button. 3. Click the "Logo" to go to home. 4. Click the "Employee" button. 5. Click the "Logo" to go to home. Click the "Seller" button. 6. Click the "Logo" to go to home	No data needed	Users should Be able to go to navigate to other webpages	As expected,	Pass

7.2 Log in

This test case will test the websites login page by verifying valid username and password

Project Name: CINE the OTT Platform			Test Designed by: Hasan Sanjary Isalm	
Test Case ID: Log in_2			Test Designed date: 11-11-2022	
Test Priority (Low, Medium, High): High			Test Executed by: Hasan Sanjary Isalm	
Module Name: Log in			Test Execution date: 13-11-2022	
Test Title: Verifying login with valid username, password				
Description: Testing the website login page				
Precondition (If any): Users must type valid username & password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website. 2. Click the "Login" button. 3. Enter username or Gmail id or yahoo id 4. Enter password. 5. Click "Submit" button	Username: Raisenil Password: 12R@*se2	Users should Login to the website	As expected,	Pass

7.3 Registration

This test case will check the registration with proper username, email password and date of birth

Project Name: CINE the OTT Platform			Test Designed by: Lokman Hossain Sharif	
Test Case ID: Registration_3			Test Designed date: 14-11-2022	
Test Priority (Low, Medium, High): High			Test Executed by: Lokman Hossain Sharif	
Module Name: Registration			Test Execution date: 15-11-2022	
Test Title: Registration with valid username, email and password, date of birth.				
Description: Testing the website login page				
Precondition (If any): Test the website registration				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website. 2. Click the "registration" button 3.Enter all valid information. 4. Click "Submit" button	Username: Hasubul1234 Gmail: ra@gmail.com Date of birth: 24/03/1999 Gender: male Password:24Ra@#se	Users will get Registered to the website	As expected,	Pass
Post Condition: User is validated with database and successfully register an account. The account details are stored in the database				

7.4 Log out

This test case test if the logout option is working properly or not

Project Name: CINE the OTT Platform			Test Designed by: Sijan Shariar Annanto	
Test Case ID: Log out_4			Test Designed date: 17-11-2022	
Test Priority (Low, Medium, High): High			Test Executed by: Sijan Shariar Annanto	
Module Name: Log out			Test Execution date: 18-11-2022	
Test Title: Verifying logout option				
Description: Test the website logout option				
Precondition (If any): 1. Need account on this website 2. Need to be logged in				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. go to the site 2. log in to the site 3. Click the "Logout" button		Successful logout	As expected,	Pass
Post Condition: User goes back to the home page				

7.5 Subscription

Project Name: CINE the OTT Platform			Test Designed by: Sanuar Hossain	
Test Case ID: Subscription_5			Test Designed date: 20-11-2022	
Test Priority (Low, Medium, High): High			Test Executed by: Sanuar Hossain	
Module Name: Subscription			Test Execution date: 21-11-2022	
Test Title: Verifying with payment				
Description: Test the website subscription option				
Precondition (If any): 1. Need account on this website 2. Need to be logged in 3. Need to transaction account				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. go to the site 2. log in to the site 3. Click the "Logout" button		Successful logout	As expected,	Pass
Post Condition: User go to the premium dash board				

8. ITEM PASS/FAIL CRITERIA

Here we have implemented a total of 11 test cases. At first, when applying the test case to the system, 85% of the test cases passed successfully, and 15% failed. The test cases failed due to some query-related issues in the database. All the test cases were successful after test case was examined after solving queryrelated problems.

9. TEST DELIVERABLES

- **Acceptance test plan:** The user acceptability tests all turned out to be successful. The user interface was easy to use but still efficient.
- **System/Integration test plan:** Every aspect of system integration was done successfully. As a result, the database was operating correctly and all of its features were responsive.
- **Unit test plans/turnover documentation:** The unit testing was done and all were working without any bugs.
- **Screen prototypes:** Total nine prototypes were made and the last system (3th) one was the one we used in this project as this was the final latest modification.
- **Report mock-ups:** There were no mock-ups created for the report we are currently reviewing because it is the project report.
- **Defect/Incident reports and summaries:** It functions well in circumstances where the project requirements are not fully understood. The process is iterative and based on trial and error between the client and developer.
- **Test logs and turnover reports:** All of module 4's test logs were displayed. All test logs and a turnover report are displayed in the previous section. All of the tests were completed correctly, and none revealed any major problems.

10. STAFFING AND TRAINING NEEDS

It This section shows how to manage the test jobs and prepare them for the work. Staffing is set for the duration of the project. Assuming that most staff will agree to do some testing is realistic. The following occupations are recognized:

Project Manager: Responsible for maturing the complete execution of the Web website. Which includes creating requirements, managing the seller relationship, and overseeing the testing cycle.

Test Manager: Responsible for fostering the expert test strategy, examining the test deliverable, dealing with test cycles, collecting measurements and reporting progress to the Project Manager, and recommending when testing should be completed.

Test Engineer: Planning tests, creating test methods, creating test information, running tests, preparing occurrence reports, examining episodes, writing mechanized test strategies, and detailing measurements to the test administrator are all responsibilities of this position.

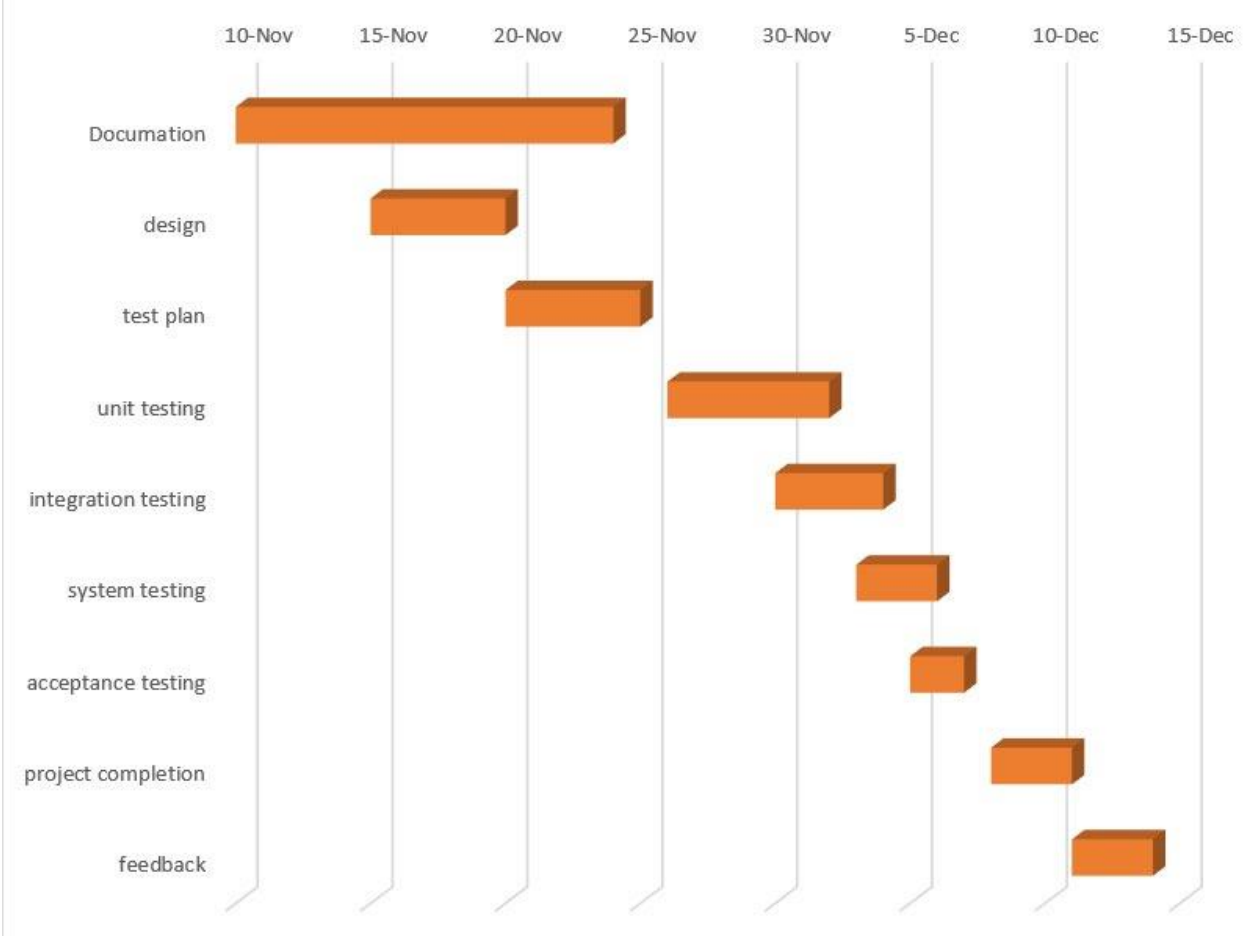
The Test manager and Specialists: Should know the website development life cycle. Because this project is being developed traditionally, this is a nonexclusive depiction of Staffing and Training requirements. As a result, the names of conscious people for each project aren't given.

11. RESPONSIBILITIES

Name	Role	Responsibilities
Sanuar Hossen	Project Manager	1. Completion of the Project. 2. Execute all the test cases and report defects. 3. Control whole project.
Sijan Shariar Annanto	Quality Analyst	1. Creation of test plans, test forms, test cases and test information. 2. Carry out testing as per the characterized methods. 3.Prepare all reports related to program testing carried out.
Hasan Sanjary Islam Lokman Hossain Sharif Tanvir Rahman Upol	Programmer	1. Researching, designing, implementing, and managing software programs. 2. Writing and implementing efficient code. 3. Deploying software tools, processes, and metrics.
Tanvir Rahman Upol Hasan Sanjary Islam	Test Engineer	1. Characterizing the testing activities All obligations of test planning 2. To check in the event that the group has all the fundamental assets to execute the testing exercises. 3. Prepare the report of testing activities. 4. Overhauling extend directors frequently around the advance of testing exercises. 5. Develop test cases and prioritize testing activities. 6. Execute all the test cases and report defects. 7. make documentation

12. TESTING SCHEDULE

Task Name	Duration	Responsible
Documentation	14 days	Test Engineer
Design	5 days	Project Manager
Test plan	5 days	Quality Analyst & Test Engineer
Unit testing	6 days	Project Manager & Test Engineer
Integration Testing	4 days	Developer
System Testing	3 days	Tester
Acceptance Testing	2 days	End user
Project Completion	3 days	Project owner
Feedback	3 days	Project manager



13. PLANNING RISKS AND CONTINGENCIES

Risk	Probability	Impact	Mitigation
Error in function	Medium	Medium	Test the web app frequently and maintain daily backup.
Give invalid input	High	High	Tell user to use right data type in each input field
Loss of encrypted data(password)	Medium	High	Maintain security check and backup

14. APROVALS

Project Sponsor	MD. Nafees Fuad Rahman
Development Management	Sanuar Hossen
EDI Project Manager	Tanvir Rahman Upol
RS Test Manager	Hasan Sanjary Islam
RS Development Team Manager	Sijan Shariar Annanto
Reassigned Sales	Lokman Hossain Sharif
Order Entry EDI Team Manager	MD. Sakib Islam