

American International University-Bangladesh (AIUB)

Department of Computer Science Faculty of Science & Technology (FST) Summer 21 22

Section: B
Software Quality Assurance and Testing

Online Auction System

A Report submitted By

SN	Student Name	Student ID
1	Momu,Sharmin Akter	18-36567-1
2	Haidar, Fahim	20-42087-1
3	Kabir, Md. Tajimul	19-40419-1
4	Chisty, Md Nomanuzzaman	19-40431-1

Under the supervision of

Abhijit Bhowmik

Associate Professor and Special Assistant of OSA,
Department of Computer Science
Faculty of Science and Technology American International UniversityBangladesh (AIUB)

Software Test Plan

for

<Online Auction System>

Version 1.0 approved

Prepared by <MOMU SHARMIN AKTER, HAIDAR FAHIM, KABIR MD. TAJIMUL, CHISTY MD. NOMANUZZAMAN>

< American International University-Bangladesh (AIUB)>

<17 August, 2022>

Checked By Industry Personnel

	•	•	
Name:			
Designation	on:		
Company:			
Sign:			

Date:

Table of Contents

Revision History	3
1. TEST PLAN IDENTIFIER: RS-MTP01.3	
2. REFERENCES	4
3. INTRODUCTION	
Background to the Problem	
Solution to the Problem	4
4. REQUEIREMNT SPECIFICATION	5
4.1 System Features	5
4.2 System Quality Attributes	7
4.3 System Interface	8
4.4 Project Requirements	12
5. FEATURES NOT TO BE TESTED	12
6. TESTING APPROACH	12
6.1 Testing Levels	12
6.2 Test Tools	
6.3 Meetings	13
7. TEST CASES/TEST ITEMS	14
8. ITEM PASS/FAIL CRITERIA	24
9. TEST DELIVERABLES	24
10. STAFFING AND TRAINING NEEDS	
11. RESPONSIBILITIES	
12. TESTING SCHEDULE	
13. PLANNING RISKS AND CONTINGENCIES	
14. APPROVALS	

Revision History

Version_1
_
Version_2
Version_3
Version_4
7

1. TEST PLAN IDENTIFIER: Online Auction System -MTP01.3

2. REFERENCES

O Qusa, H., Tarazi, J., & Akre, V. (2020). Secure E-auction system using blockchain: UAE Case Study. 2020 Advances in Science and Engineering Technology International Conferences (ASET).

3. INTRODUCTION

Background to the Problem

- A system that runs online auctions for various items on a website and serves sellers and bidders accordingly is known as an online auction project. The system is intended to allow users to set up their items for auctions as well as register and bid on other things that are up for grabs. The system also includes goods organized by category and price. Admin is also given feedback from users.
- The present auctioning system's security issues encouraged us to take on this project. We see the need for improvement in the existing system since it is vulnerable to a wide range of fraudulent operations. Users must be validated before they can sell or purchase things, which is what we attempted to do with our project.

Solution to the Problem

- o Internet auctions are a type of virtual auction. The vendor sells the product to the bidder who offers the highest price. Online auctions provide new sales channels for fresh new items for merchants while also providing purchasers with ideal purchasing circumstances. The auction bidding finishes at the appointed hour. In the case of multiple-lot sales, the participants with the highest bids at the end of the auction are compelled to shop for the items. If no bids are placed at or over the reserve price, the auction ends without a winner.
- Electronic shopping has distinct advantages for companies. Consider a store, showroom, or
 office that is open 24 hours a day, seven days a week. The proposed e-Auction application is a
 B2C (business to consumer) application in which customers may bid on and purchase products
 online.
 - Maintain & Track record for every transaction.
 - Detect any types of fraud
 - Easy way to buy or sell products from home.
 - Hassle-free transaction.
- O Some qualities will form the basis of our proposed solution. There is A database system that stores all information about the buyer, seller, and those who add or sell items. There is an

admin area where you may change the auction time and notice, track comments and payments, and see history. All of the group members are debating this auction system and how it may provide a better solution as well as a better alternative for customers. We will try to improve functionality and use new technology to reduce online fraud and safeguard transactions.

4. REQUEIREMNT SPECIFICATION

4.1 System Features

1. Admin Login

Functional Requirements

- 1.1 Admin will login this system with the admin password and username
- 1.2 If login successful admin homepage will be displayed otherwise it will redirect to admin login page

Priority Level: High

Precondition: Admin must have valid username and password.

2. User Login

Functional Requirements

- 2.1 User will login this system with the User password and username
- 2.2 If login successful user homepage will be displayed otherwise it will redirect to User login page

Priority Level: High

Precondition: User must have valid username and password.

3. Add Admin

Functional Requirements

- 3.1 If admin login is successful then add admin is possible. An existing Admin can add another admin
- 3.2 AdminName, Password & Email information needs to be valid if we want to add admin. If admin added is successful then it will show a successful massage and redirect to add admin page.

Priority Level: Medium

Precondition: An existing admin must log into this system in order to add a new admin.

4. Delete User

Functional Requirements

- 4.1 An admin can delete user after his/her successful login.
- 4.2 If admin select delete option and confirm the delete pop up and if admin is redirect to Delete user page, then delete user is successful

Priority Level: Medium

Precondition: An admin must log into this system in order to delete user.

5. Delete Post

Functional Requirements

- 5.1 An admin can delete post after his/her successful login.
- 5.2 If admin select delete option and confirm the delete pop up and if admin is redirect to Delete post page, then delete post is successful

Priority Level: Medium

Precondition: An admin must log into this system in order to delete post.

6. Notifications

Functional Requirements

- 6.1 An admin can notify all the users after his/her successful login.
- 6.2 Admin has to put a Date, Time, notification message and then press notify to send the notification to the users. A message will pop up if this operation is successful.

Priority Level: Low

Precondition: An admin must log into this system in order to post a notification.

7. User Post

Functional Requirements

- 7.1 User has to Login with valid username and password in order to do Post.
- 7.2 User need to put all information for add new product and then press Add now. If New product added is successful then it will show a successful massage and redirect to Post page.

Priority Level: High

Precondition: A user must log into the system to post a product.

8. Update User Profile

Functional Requirements

- 8.1 User has to Login with valid username and password in order to do Update user profile.
- 8.2 User can update his profile name, phone, address or email but to update user has to give his/her valid password. After then he/she can update profile. This operation is successful if it shows successful massage and redirect to update profile page.

Priority Level: Low

Precondition: A User must log into this system in order update his/her profile.

9. User Logout

Functional Requirements

- 9.1 User has to Login with valid username and password in order to do Logout.
- 9.2 It will be successful if after pressing logout it redirects to home page.

Priority Level: Low

Precondition: An Admin or a user needs to successfully log in first then they can do logout operation.

10. Sign Up

Functional Requirements

- 10.1 If anyone wants to register in our system, he/she needs to give valid information to register.
- 10.2 It will be successful if after pressing Registration button it shows a successful pop up and redirects to Sign Up page.

Priority Level: Medium

Precondition: None

4.2 System Quality Attributes

There are some quality attributes that are very important to ensure the quality of a software.

Usability: Any user should be able to register and access the system.

Efficiency: Every functional requirement must be met.

Portability: Those devices that has web or can access internet, it will function perfectly on all those devices.

Maintainability: If a problem is found or detected in the system, it will be possible to solve it.

Correctness: All of the characteristics mentioned will be finished according on the consumers' preferences.

Functionality: A registered user or an unregistered user can see the current bidding of any product by going current running bid, but a registered user can only bid for those products.

Accessibility: Because it is web-based software, it can be accessed from anywhere on the Internet.

Readability: It is important to show current bid price perfectly as in one product lots of customer can bid. So, it is critical to determine whether the system is strong enough to withstand any condition.

Reliability: All functions will function properly in a variety of working situations or devices.

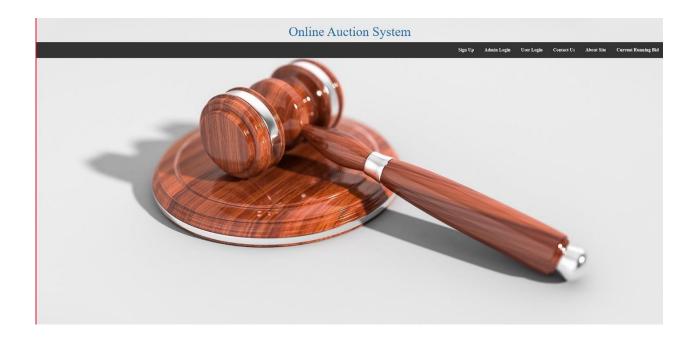
Flexibility: Will be adaptable enough to meet any demands.

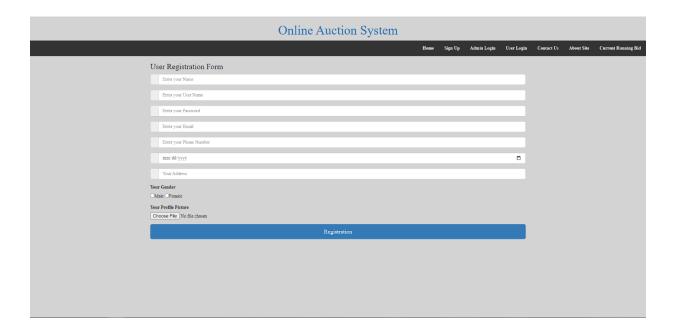
Integrity/Security: System integrity or security should be adequate to prevent unauthorized access to system operations, data loss as well as to safeguard the privacy of data entered into the system. Actually, security comes with integrity.

Installation: Because it is web-based, there will be no long downloads or installs. It will be a web address. It is really simple for any person to access.

Customer Support: Given the necessity of a functioning auction system, this is a key requirement. The service provider should offer live email and phone support.

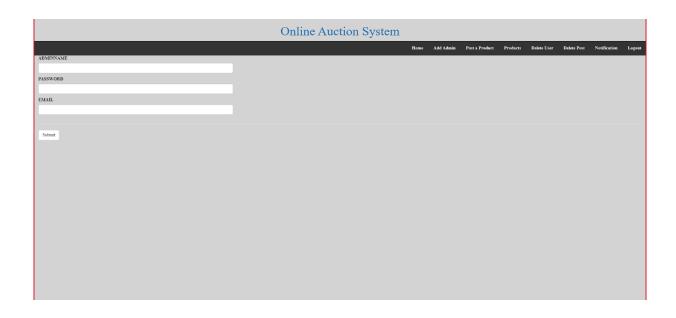
4.3 System Interface



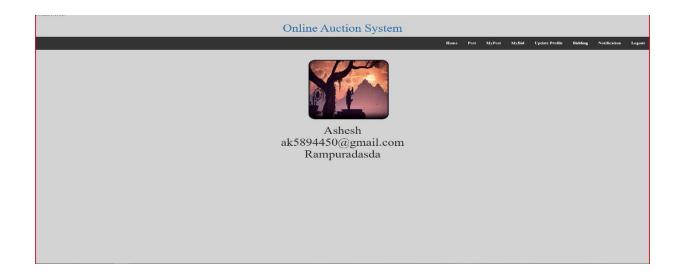


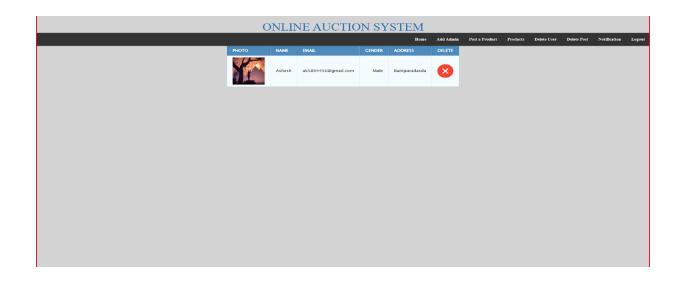
О	nline Auction S	ystem							
			Home	Sign Up	Admin Login	User Login	Contact Us	About Site	Current Running Bid
	Sign in to continue								
	Enter User Name								
	Sign in								
		Password?							

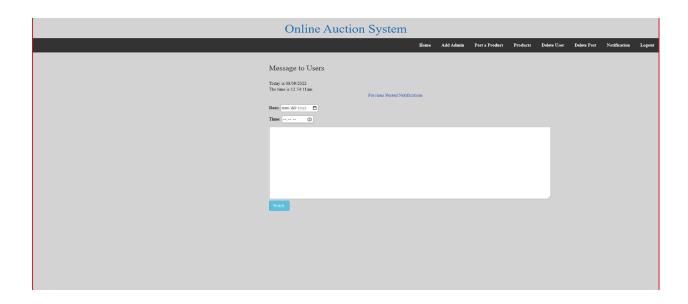
Online Auction System								
	Home	Add Admin	Post a Product	Products	Delete User	Delete Post	Notification	Logout
Welcome Admin								

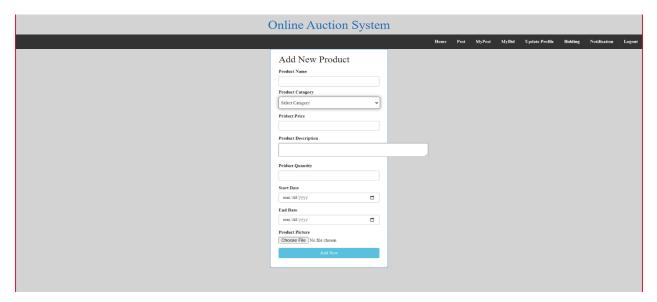
















4.4 Project Requirements

- o Time: To complete this web-based application around 3 months (90 days) can be needed.
- o Budget: 5,50,000 BDT
- o Size: The final size of this web-based application will not be more than 200-400 MB. But for users it will be a website Link.
- O Globally there are lots of online auction system in the web. But we mainly focused on Bangladesh. So, this system only for Bangladeshi users.
- o HTML, PHP, JavaScript and Ajax will be used to build this web-based application.

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. Below there are some modules in our project we did not perform selenium testing.

In User:

- Bidding
- MyPost
- o MyBid

In Admin:

- Products
- o Post

6. TESTING APPROACH

6.1 Testing Levels

UNIT TESTING: Unit testing is the first level of testing in software development where we test each unit of the software. Units are individual, small and independent part of a program. The main purpose is to ensure smallest units are working properly so that they do not cause an issue after integrating into module. In unit test, part of the code is to be isolated and tested individually. Developer will perform these tests while coding or developing those units. Unit tests can be monitored by development team lead. Testing tools and packages can be downloaded from official websites. We can test smallest units of the project at early stage without waiting for the project to be integrated or waiting for others code. By performing unit test we will be able to ensure the functionality of smallest units and detect bug in the earliest stage possible and simplify later debugging process as well as quality of the product.

INTEGRATION TESTING: Integration testing comes after unit testing and shall be performed by dedicated testing team. The main target is to test different modules of the software to ensure each module works properly as an independent part of the program and validate its performance, functionality, and reliability of the integrated module. We will also validate the performance of each module. If integration

testing is done in earlier stage, there will be less bug and debugging process will be easier in both topdown and bottom-up approach. Integration testing is important to check the functionalities implemented by the developer against user requirements. There are various integration testing methodology such as Big Bang, Incremental, Top-down, Bottom-up, Sandwich etc. Any of them can be followed whatever suits the development process and seem convenient. Test strategy must be ready before starting integration testing. Critical modules should be identified before integration testing on a priority basis. When the test cases are prepared, an automation testing tool should be selected to execute the test cases for integration testing. Defects should be identified and reported for re-testing.

System Testing: When integration testing is completed, System testing should be performed to ensure all the modules are working properly together after connecting them as a whole software. This should also be done by dedicated testing team. It can be considered as black-box testing as it is not required to know what is inside those modules and how they are working. We test the system as a whole and tester should be aware of the requirements and real-time usage of the application. Here also test strategy must be ready and critical modules should be identified on a priority basis before starting system. End-to-end testing must be done to verify interaction between all the components and external applications. If system testing is done properly, mitigating and maintenance will be a lot easier later. Low priority bugs can be left to be tested at acceptance testing. System testing must check all the quality attributes of the software to ensure maximum quality of the product.

ACCEPTANCE TESTING: Acceptance test is the last major testing level at software development process which takes place after system testing and it's done by the user. Here customer decides or reviews if this software is ready to be in the market or not. For this, an alpha or beta version of the product should be prepared. User should have proper knowledge about the product, domain and its features. Issues found in the Acceptance test phase should be considered a high priority and fixed immediately. Acceptance test validates the effort of both testing and developer team and reflects the quality and overall software quality. Various types of acceptance test are recognized such as – UAT, BAT, RAT. CAT, Alpha/Beta Testing, etc. Lack of enough data and wrong testing audience could impact the result of acceptance test which should be controlled properly.

6.2 Test Tools

For the project required testing tools are described below –

Selenium: Selenium is the most popular open-source browser automation tool that can run scripts across multiple browsers and automate web application for testing. It is an enhanced framework that supports cross-platform and cross-browser and can be easily integrated. It is language independent and support various popular languages such as Java, C#, Python, Ruby, PHP, JavaScript etc. it can be integrated with popular testing tools such as SauceLabs, Maven, TestNG, QMetry, Extent, JUnit and others and run parallel testing. It is not a single tool, instead it's a collection of tools that can later be integrated with Agile, DevOps others. We can also handle reports with selenium. Selenium itself offers different tools like Selenium IDE, Selenium WebDriver, Selenium Grid etc. Selenium also supports mobile testing. We can test hybrid, native or mobile web apps with selenium. For mobile testing, few popular tools of selenium are Appium, Selendroid, Robotium, IOS-driver etc. supporting Android, IOS and other popular OS. Selenium is a universal use case which is good enough for testers to put forth a greater effort and ignore the codeless trend. Various third-party solutions are available for report like TestNG, JUnit, Extend Library, Allure to prepare report in various format including graphs, timeline, screenshots, pic charts, error logs and so on.

Postman: Postman is one of the most famous testing tools for comprehensive API testing. It provides maximum flexibility and enables frontend, backend, full-stack developer or QA engineer to work in parallel and accelerate development process. Postman also offers cross-team and cross-platform support for developers for maximum flexibility. We can run end-to-end testing and evaluate functionality, performance, exceptions, reliability, and debug. It can send API requests and monitor responses from API and also automate the whole process. It offers various integrations of tools like Jenkins, Travis CI to automate API tests. For CLI (command line) newman can be used with postman. It can also import different schema formats like JSON, Rest, OpenAPI, GraphQL, cURL, RAML, Swagger. Data can be easily tracked with the help of Postman test reports that is sent through the request builder. On test failure, it generates reports using Collection runs. Also, we can generate reports in HTML format.

Apache JMeter: Apache JMeter is one of the best load testing tools for software load testing. It can be used to test web application as well as JavaScript desktop application. It is an open-source free software therefore saves budget. It is compatible with several web and networking protocols such as HTTP, HTTPS, XML, SOAP, FTP, LDAP, JDBC, POP3, IMAP, SMTP, TCP. As the application is a Java-oriented system, it works with JDBC and Message-oriented middleware (MOM) with the help of JMS. Shell scripts and native commands are easier to implement the test plans with JMeter. JMeter can test both dynamic and static application resources. Servers, logs, queries, scripts, files etc. resources can be utilized during test phase. JMeter is popular for load testing so testers can inspect applications under heavy load and evaluate their stability, functionality, reliability and performance against different load levels. Apache JMeter offers GUI interface and its highly extendable with plugin manager. This is a multithread application and can handle dynamic input.

6.3 Meetings

Every week, our test team meets to discuss progression, difficulties, work status and suggestions for testing process. To improving functionality, error characteristics and feasibility test, regular meeting is necessary. Every two weeks, test team lead or supervisor will check if progress meets user requirement and quality. Continuous monitoring and supervising should be maintained to ensure maximum quality. Additional meetings may be called as needed in emergency situations. Testers should discuss difficulties and progress with other testers. Employees may participate in live chat sessions from home to discuss new advancements and recommendations for improving functionality before any planned meetings. Different teams and their progress should be collaborated by team lead and team lead will be in continuous touch with every team via regular meeting.

7. TEST CASES

Project Name: Online Auction System	Test Designed By: Tajimul
Test Case ID: FR_1	Test Designed Date:
	16-8-22
Test Priority: High	Test Executed By: Chisty
Test Title: Admin Login Test	Test Execution Date:
	17-8-22
Description: Check If admin login works perfectly with valid username and password.	
Precondition: Admin must have a valid username and password.	
Dependencies:	

Test Steps	Test Data	Expected	Actual Results	Status	
		Results			
1. Go to the website	Username:	Login	Login successful	Pass	
2. Then Admin Login	Ashesh	must be			
3. Put valid username and password	Password:	successful			
4. Click Sign In button	12345678				
Post Condition: Redirected to admin dashboard					

Project Name: Online Auction System	Test Designed By: Fahim			
Test Case ID: FR_2			Test Designed Date:	
	17-8-22			
Test Priority: High			Test Executed By:	Tajimul
Test Title: User Login Test			Test Execution Da	te:
			18-8-22	
Description: Check If user login works perfectly v	with valid username and p	assword.		
Precondition: Admin must have a valid username	and password.			
Dependencies:				
Test Steps	Test Data	Expected	Actual Results	Status
		Results		
1. Go to the website	Username:	Login	Login successful	Pass
2. Then User Login	Ashesh	must be		
3. Put valid username and password	Password:	successful		
4. Click Sign In button	12345678			
Post Condition: Redirected to user page				

Project Name: Online Auction System			Test Designed B	y: Momu	
Test Case ID: FR_3			Test Designed Date: 16-8-22		
Test Priority: Medium	Test Executed B	Test Executed By: Chisty			
Test Title: Add Admin			Test Execution D	Test Execution Date: 17-8-	
Description: Check If add admin works perfectly wipassword.					
Precondition: An existing admin must log into this s Dependencies:					
Test Steps	Test Data	Expected Results	Actual Results	Status	
 Go to the website Then Admin Login Put valid username and password After Login click Add Admin Put new AdminName, Password & Email Click Submit 	AdminName: TestAdmin Password: 123#AAA Email: aa@gmail.com	New Admin must be added	Admin added successful	Pass	
Post Condition: A new admin added to database	L	I		1	

Project Name: Online Auction System			Test Designed By: Tajimul	
Test Case ID: FR_4			Test Designed Date:	
			15-8-22	
Test Priority: Medium			Test Executed By: Momu	
Test Title: Delete User			Test Execution D	ate:
			15-8-22	
Description: Check If delete user works perfectly.				
Precondition: An admin must log into this system to delet	e user.			
Dependencies:				_
Test Steps	Test Data	Expected	Actual Results	Status
		Results		
1. Go to the website	N/A	User will	user delete	Pass
2. Then Admin Login		be deleted	successfully	
3. Put valid username and password				
4. After Login click Delete User				
5. Click delete logo to delete a user				
Post Condition: A user is deleted from database				

Project Name: Online Auction System	Test Designed By: Fahim			
Test Case ID: FR_5			Test Designed Da	ate: 14-8-22
Test Priority: Medium			Test Executed By	y: Chisty
Test Title: Delete Post			Test Execution D	ate:
			15-8-22	
Description: Check If delete post works perfectly				
Precondition: An admin must log into this system to delet	te post.			
Dependencies:				
Test Steps	Test Data	Expected	Actual Results	Status
		Results		
1. Go to the website	N/A	A post	post delete	Pass
2. Then Admin Login		will be	successful	
3. Put valid username and password		deleted		
4. After Login click Delete Post				
5. Click delete logo to delete a post				
Post Condition: A post will be deleted from database				

Project Name: Online Auction System	Test Designed By: Tajimul
Test Case ID: FR_6	Test Designed Date: 16-8-22
Test Priority: Low	Test Executed By: Momu
Test Title: Notifications	Test Execution Date:
	16-8-22
Description: Check If Notifications works perfectly	

Precondition: An admin must log into this system to post a	a notification.			
Dependencies:				
Test Steps	Test Data	Expected Results	Actual Results	Status
 Go to the website Then Admin Login Put valid username and password After Login click Notification Put valid information and click Notify 	Date: 18/08/2022 Time: 8.00 pm Description: For testing	Notification must be posted successfully	Notification successfully posted.	Pass
Post Condition: All users able to see that notifications.				

Project Name: Online Auction System	Test Designed By	: Tajimul		
Test Case ID: FR_7	Test Designed Date: 16-8-22			
Test Priority: High			Test Executed By	
Test Title: User Post			Test Execution Date:	
			17-8-22	
Description: Check If user post works perf	ectly with valid User username an	ıd		
password.				
Precondition: A user must log into the syst	em to post a product.			
Dependencies:		_		_
Test Steps	Test Data	Expected	Actual Results	Status
		Results		
1. Go to the website	Product name: Iphone12	A new	Post added	Pass
2. Then User Login	Category:	product	successfully	
3. Put valid username and password Mobile must be				
4. After Login click Post	Price:	added		
5. Put all valid information and click	75000			
Add Now	Description:			
	Brand new, Quality smart			
phone				
	Quantity: 1			
Start date:				
07/25/2022				
End date:				
07/26/2022				
Post Condition: A new post added in database				

Project Name: Online Auction System	Test Designed By: Momu
Test Case ID: FR_8	Test Designed Date: 15-8-22
Test Priority: Low	Test Executed By: Fahim
Test Title: Update User Profile	Test Execution Date:
	16-8-22
Description: Check If update user profile works perfectly with a User valid username	
and password.	
Precondition: A User must log into this system in order update his/her profile.	
Dependencies:	

Test Steps	Test Data	Expected	Actual Results	Status
		Results		
1. Go to the website	Name:	Existing	Profile updated	Pass
2. Then User Login	Testing	user	successfully	
3. Put valid username and password	Password:	profile	-	
4. After Login click Update Profile	123#EQ	must be		
5. Put all valid information and click Update Now	Email:	updated		
	ee@gmail.com			
	Phone:			
	01239123123			
	Address:			
	Rampura,			
	Dhaka			
Post Condition: User data will be updated in database				

Project Name: Online Auction System	Test Designed By: Chisty			
Test Case ID: FR_9			Test Designed Date: 13-8-22	
Test Priority: Low				y: Momu
Test Title: User Logout			Test Execution Date: 14-8-22	
Description: Check If user logout perfectly				
Precondition: An Admin or a user needs to succlogout operation. Dependencies:				
Test Steps	Test Data	Expected Results	Actual Results	Status
Then User Login Put valid username and password After Login click Logout	N/A	A user must be logged out from his/her account	Logout successful	Pass
Post Condition: Redirected to home	L	L	-L	I

Project Name: Online Auction System			Test Designed By: Momu	
Test Case ID: FR_10			Test Designed Date:	
			11-8-22	
Test Priority: Medium			Test Executed By	y: Tajimul
Test Title: Sign Up			Test Execution Date:	
			11-8-22	
Description: Check If sign up works perfectly with valid username and password				
Precondition:				
Dependencies:				
Test Steps	Test Data	Expected	Actual Results	Status
		Results		

1. Go to the website	Name: Testing	A new	New User added	Pass
2. Then Sign Up	User name: Ashesh123	user must	successful	
3. Put all the valid Information	Password: ASH@#12345	be added		
4. Click Registration	Email: askej@gmail.com			
	Phone: 01312321313			
	Date of Birth: 07/25/2022			
	Address: Rampura, Dhaka			
Post Condition: A new user will be added in d	atabase			

7.1 Testing by Selenium

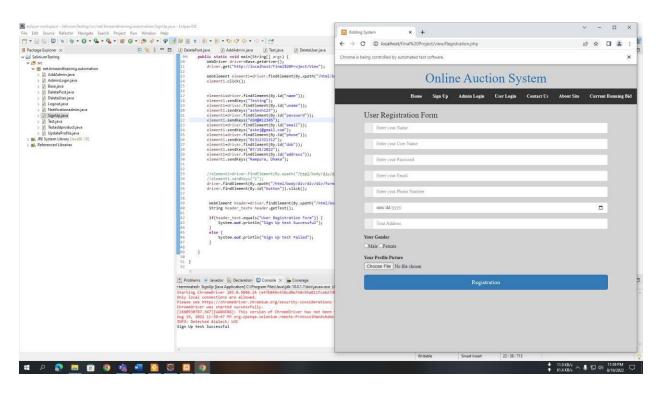


Figure 1: Sign Up testing module

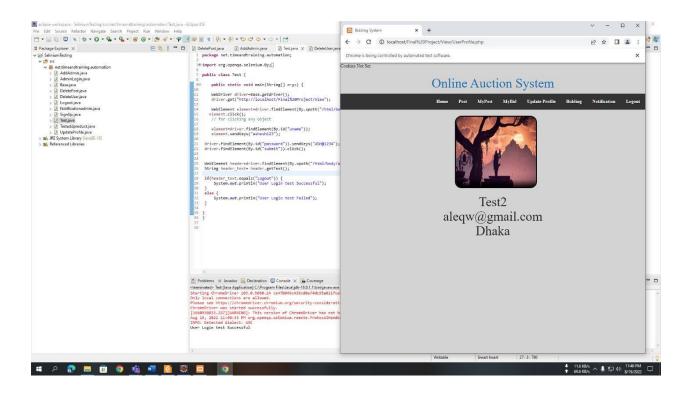


Figure 2: User Login testing module

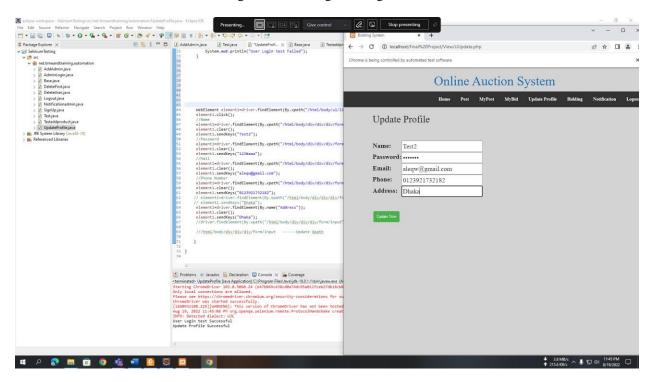


Figure 3: User Update profile testing module

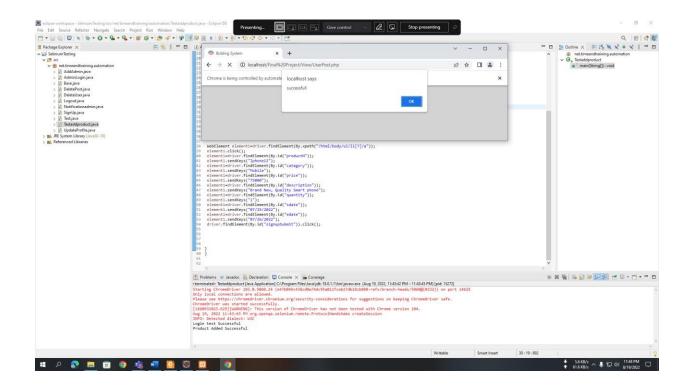


Figure 4: Product add testing module

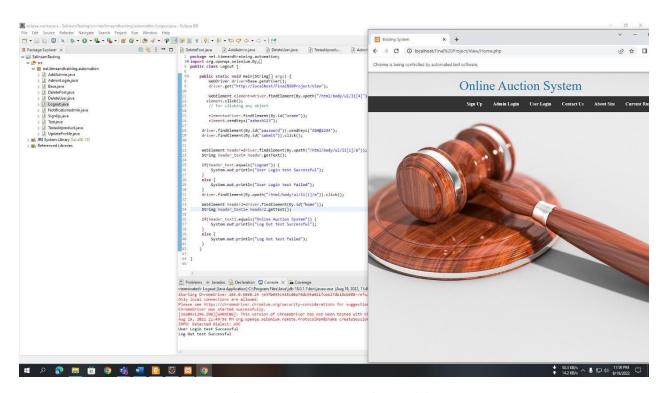


Figure 5: User Logout testing module

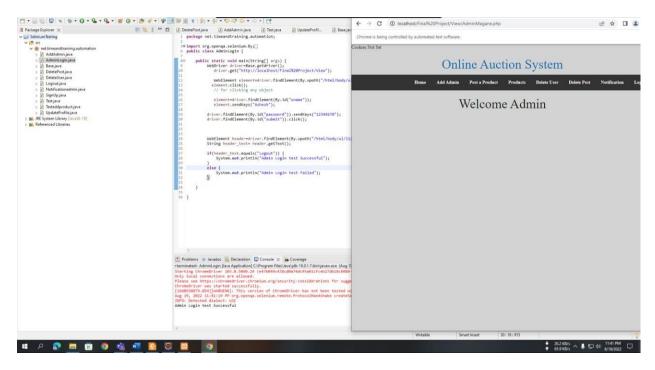


Figure 6: Admin Login testing module

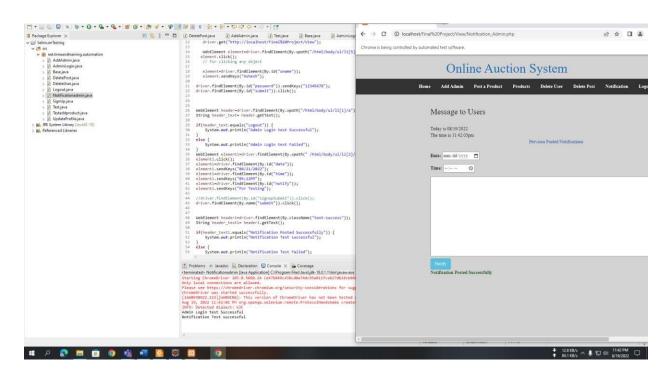


Figure 7: Admin Notification Testing module

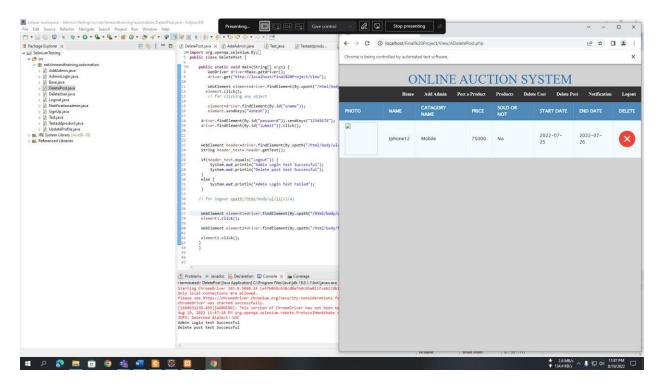


Figure 8: Delete Post testing module

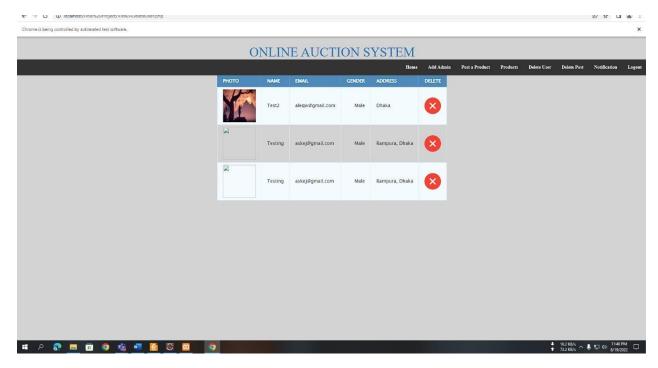


Figure 9: Initial User module

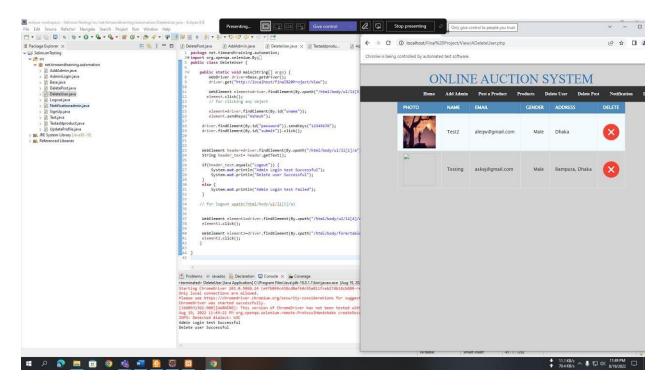


Figure 10: Delete User testing module

8. ITEM PASS/FAIL CRITERIA

This section's primary goal is to outline the PASS/FAIL standards for the tests included in this project. A component, unit, system, or integrated test item will be deemed to meet the pass criterion if it scores between 80% and 95%, and the failure criteria will be applied to any system or unit scoring below 80%. This measurement is what we used in our project to determine how dependable and user-satisfying it is.

9. TEST DELIVERABLES

After development, technical process should be followed. Delivery process should be defined in SQ Test plan –

- Unit test findings and result should be documented properly. Product should be analyzed properly to help post testing. Turnover document must be ready.
- Connected modules in system integration, test plans, result should be documented. COTS and 3rd party integration should be mentioned. OTS tolerance level and component functionality should be properly described. For system testing, DRE, PhAge, Spoilage etc. calculation should be calculated and documented before software delivery to make it easier to understand QA improvement and effort.
- Acceptance test audience should be chosen wisely as wrong testers can cause wrong result and feedback. It is like a contact for development team to be released and software to be ready to deliver.

- Test strategy will be decided based on System Requirement Specification (SRS) document. It is a high-level document prepared by the Test manager or lead. Test objective, approach, scope, levels, entry & exit criteria, staffing etc. must be mentioned.
- Test plans and progress should be tracked with project management tools like Clickup, Wrike etc.
- Test summary report might be needed depending on client demand to review overall performance. Test Summary Report includes all the test activities, test results, client details, tester info, scope, objectives, test approach, defect report etc.
- Screen-based prototyping concepts and toolsets of software system should be included with the document. It helps to understand software functionality and potential threats or issues. It is used to describe the requirement fulfillment to the end user.
- Mockup report must be ready before project delivery to provide a model, visual draft of what the project would look like or how the design was planned initially. Different formats for charts, graphs and illustrations can be used to comfort reader to view the whole thing without going back and forth.
- Test manual outlining the unit, integration and system tests before delivery and expected outcomes should be included in documentation to compare planned and original product.
- The test log contains record of occurred events during a test schedule and execution, as well as the status of each phase. We revised every phase has been noted and data has been recorded data which describes activities and different approaches in the project.
- Incident reports should be ready to keep employees safe and ensure best practices has been established in the workplace during the project to increase industry/organization grade and to ensure a successful project. We made full summary and report in our project.
- An employee turnover report shows the number of terminated employees among the active employee in the organization and the monthly analysis report. The average is calculated for the year. So, it is very much important for our projects and plays a significant role in maintaining a clear process and standard in development.

10. STAFFING AND TRAINING NEEDS

The staffing approach's purpose is to ensure that there are enough employees on the project with the right knowledge and experience to finish it effectively. Additionally, staffing and training are important human resource management techniques utilized to improve corporate performance through the development of human capital assets. The tasks are necessary to finish the project are listed in detail in the section below. It describes the positions involved in the project, their duties, and the number of individuals required to fill each position.

- The project will function well if it is well-budgeted and all of its perspectives are active. We ought to be aware of these things. Our initiative must be expanded to include training and other activities as necessary.
- First and foremost, there will be at least one or two project managers who are adept at organizing, planning, and carrying out projects while sticking to deadlines and financial restrictions.

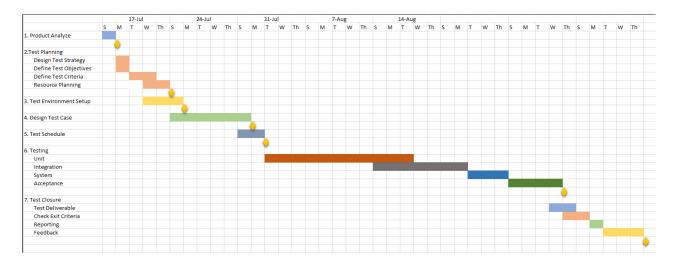
- Lead programmers were employed for our project. Software engineers that handle many
 projects are known as lead programmers. He is in charge of managing projects, making
 technical choices, and developing work on the technical level. He is in charge of
 accomplishing objectives and keeping deadlines at the management level.
- For our project, the system/integration and acceptability testing phases require at least one full-time tester. (Full-time tester) will be entrusted with the project for a period of four months after it begins. In the absence of a tester, the test manager will act in this capacity. We must solve several training-related issues if we want to guarantee a thorough and proper exam.
- The fundamental aspects of our project interface need to be taught to developers and testers.
 Before the project is officially approved, operations employees must also get thorough training in this project communication procedure.
- Determine how to transform a designer's vision into a strategy that developers can accomplish by analyzing the project requirements. We may complete these kinds of tasks by including a requirement analyst in our project.
- In regards to our project's testing method and goals, we determined its goal. Observed how a testing cycle appears when it has been completed successfully.
- A crucial part of project objectives is played by the monitoring and control mechanisms. A
 monitoring system will be useful if project-related talks have taken place. The developer will
 monitor the development of the project and make necessary modifications.
- User management and development management are more integrated. The user administrator makes their choice after considering modifications to the control procedure. Thus, in our project (Online Auction System), the user management team could be consulted when the development management system requested assistance to improve the project. The testing team must then tell whether there is a problem or a need for an upgrade or modification.

Finally, we may state that staffing and appropriate training (if required) are crucial. Staffing and training are crucial if we want to complete the project successfully with scheduled timing.

11. RESPONSIBILITIES

	TM	PM	Dev.	Test	Client
			Team	Team	
Acceptance test Documentation & Execution	X	Χ		Χ	Х
System/Integration test Documentation & Exec.	X		Χ	Χ	
Unit test documentation & execution	X		Χ	Χ	
System Design Reviews	X	Χ	X	Χ	Х
Detail Design Reviews	X	Χ	Х	Χ	
Test Procedures and rules	X	Χ	Х	Χ	
Screen & Report Prototype reviews			Χ	Χ	Х
Change control and Regression testing	X	Χ	Χ	Χ	Х

12. TESTING SCHEDULE



13. PLANNING RISKS AND CONTINGENCIES

Risk and contingency planning are crucial to getting good results from a project. It is within a project that it is used to manage the risk for exceptions. On the other hand, contingency plans are developed by governments and other commercial organizations. Every business has rules and regulations that they must follow in the event of a disaster. The plan may also include policies for disaster mitigation. Therefore, it is very important to follow these rules and do everything for the benefit of the organization.

14. APROVALS

Project Sponsor	
Development Management	DohaTec New Media
EDI Project Manager	Haider, Fahim
RS Test Manager	Kabir, Md. Tajimul
RS Development Team Manager	Momu,Sharmin Akter
Reassigned Sales	Hossain, Lokman
Order Entry EDI Team Manager	Chisty, Md. Nomanuzzaman