



American International University-Bangladesh (AIUB)

Department of Computer Science

Faculty of Science & Technology (FST)

Spring 20-21

Section: B

Software Quality Assurance and Testing

Learning Loft

A Report submitted

By

NAME	STUDENT ID
Debashish Dey	18-37229-1

Under the supervision of

Faculty Name

Abhijit Bhowmik

Faculty Designation

Associate Professor & Special Assistant [OSA], Computer Science

Software Test Plan

for

Learning Loft

Version 1.0 approved

Prepared by,

Debashish Dey

American International University-Bangladesh (AIUB)

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Revision History

Revision	Date	Updated by	Update Comments
0.1	2021.04.26	Debashish Dey	First Draft
0.2	2021.04.27	Debashish Dey	Second Draft

TEST PLAN IDENTIFIER:

Learning-Loft-MTP02.1

REFERENCES:

None Identified

INTRODUCTION:**Background to The Problem**

For higher studies like Engineering, specific departments (CS), there are many tutorials, or websites about this content. But students are not that much active on that educational platform, maximum students visit those websites or YouTube channel before exam, they aren't active all time. Students are seasonal customers for them, and for higher education platforms all subjects aren't gathered anywhere, all topics aren't organized, and there is no guideline or career path and step by step paths for engineering.

Solution To The Problem

We want to make a platform where users can study and get guidelines and mapping of his/her career, and we are trying to give them an earning source besides their study. Which gives them the inspiration to do study as well as earning money.

The Solution is feasible to meet the business objective.

The target customers are basically students. There will be a core type of user, based on performance and activity that user will be promoted. A single user will perform both sides. One can earn through uploading videos as well as he/she can earn from viewing videos.

What will they earn?

They will earn virtual coins, by these coins someone can buy any kind of gift cards which will be merchant by several platforms as an example eazy, daraz, bkash, nagad and many more solutions also. It will depend based on the merchants

Till now there is no platform like this but there are more platforms with a goal of online teaching or helping.

REQUIREMENT SPECIFICATION**1. Software Login****Functional Requirements**

1.1 Software shall allow users to login with their specific username and password

1.2 If the login is successful, the dashboard of the user account will be displayed.

1.3 If the login is unsuccessful, the random verification code will be generated and sent to the user's email or mobile number address by the system to login again.

1.4 If the number of login attempts exceeds its limit (3 times), the system will block user account login for some times (1 hour/1 day).

Priority level: High

Pre-condition: Admin users have valid user id and password.

2. User management/Administrator

2.1 View and Edit Users: View a list of users. For each user, the user's name, group membership, and associated authentication provider are displayed.

2.2 Add New Use: Add a user by assigning a unique name and password. Optionally, assign a group membership to the user.

2.3 View user properties.

2.4 Change user properties. Update the password or assign the user to one or more groups.

2.5 Delete one or more users.

Priority level: High

Pre-condition: Admin users have valid user id and password.

3. Quick view

3.1 All subject: The main function of quick view feature. All subject names will be included in This function. The subject will be sorted first letter of subject name. Visitors can search for his prophetic subject.

3.2 Suggested: We will collect the data from all viewers. In this section the top most viewed Subject will suggest the visitor.

3.3 All viewers: All viewer names of a particular subject will be included in this function. And one viewer will see the other viewer profile. Also they can contact each other through message.

4. Blog

4.1 *latest*: The latest upload video can be found here. So that the visitors can easily know about the latest video.

4.2 *From L'Earning Loft*: In this section, videos uploaded by the moderator or organizer can be found here. No one except the organizer can upload the videos here.

4.3 *From viewer*: Videos or content uploaded by the moderator or organizer can be found here. Anyone can upload videos here but conditions that must be accepted by the moderator. Uploaders can apply to delete his or her videos.

5. Quiz:

It is the place where one can host a quiz and those who are interested can participate on the quiz.

Functional Requirements

5.1 Users can host special quizzes who have 300 followers.

5.2 Users can attend the quiz.

5.3 Quiz time will be given.

5.4 The system will give the question when it is time to quiz.

5.5 2K points will be given among the top three who got the highest marks and submitted first.

Priority Level: High

Preconditions: Users will need 300 followers to host a quiz and participate will need to fill up the quiz form to attend the quiz.

6. Chat box: The Chat box is our Instant Messaging system that serves various purposes for all kinds of users on our website.

Functional Requirements

6.1 User to User: The chat box offers Instant Communication services between any two users in our platform. It allows two or more learners to discuss and collaborate on problem solving endeavors. Messages, Images, videos and Documents will be relayed instantly.

6.2 User to Uploader: While, or after Viewing a video, a user can choose directly Message the uploader of the said video for further Clarification. This is a much-needed feature that is absent in other popular video streaming websites like YouTube or Dailymotion. If someone needs further discussions on the topics discussed in a certain video, the chat box might come in handy.

6.3 System Messages: The Chat box can Also deliver automated messages directly from the system. It can welcome new members, notify them of future updates to our website, warn them of rule violations and warnings, and auto promote new videos from content Creators.

6.4 Topic-Specified Group Chats: Our chat box can connect a user to other users who are studying similar topics to further encourage collaborative efforts. A user can find Other people who are studying and teaching their subjects and this will allow users to learn and share knowledge in a seamless and effective way

7. Marketplace

7.1 To activate the seller part of the marketplace, one user must have 200 followers.

7.2 A Seller can sell a service to another user, service like video editing, thumbnail making, Seller can sell his individual course on this platform.

7.3 one user can purchase the service through points or money.

7.4 one user can boost his videos through money.

FEATURES NOT TO BE TESTED

1. Networks
2. Hardware
3. User's Information (Name, Address, Contact)

TESTING APPROACH

Testing Levels

The testing for a robust web-based system for student and faculty management will consist of Unit,

System/Integration (combined) and Acceptance test levels.

1. System/integration testing will be done by at least one full time developer.
2. Unit Testing will be done by the developer and will be approved by the development team leader.
3. Finding all the features meet the criteria or not.
4. All unit test information will also be provided to the test person.
5. System/Integration Testing will be performed by the test manager and development team leader
6. The system will enter in the System/Integration test after all critical defects have been corrected.
7. It will check that all the features are working correctly or not.
8. Acceptance Testing will be performed by the actual end users with the assistance of the test manager and development team leader.
9. The acceptance test will be done for a period of 20 days after completion of the System/Integration test process.

Testing Type	Testing Method	Person	Reason
Unit Testing <ul style="list-style-type: none">• Account• Password• Register	White-box testing	Programmer	Individual units/ components of a software are tested at least once. All logical decisions verified

			on their true and false values. All loops executed at their boundaries.
Integration Testing	Gray-box testing	Programmer And Tester	Test case list, sample output,data printouts and defect information.
System Testing	Black-Box Testing	Tester	Validate Id and password. Validate input and output. Validate if the system is working or not.
Acceptance Testing	Performance Testing	Development team and users	Formal testing with respect to user needs. The acceptance criteria to enable the user. Customers or other authorized entity to determine whether or not to accept the system

Test Tools:

1. JIRA Testing & QA Testing Tool will be used to manage test cases and reporting.
2. Microsoft Word will be used to write test cases.

Meetings

The test team will meet once every week to evaluate progress to date and to identify errors, trends and problems as early as possible. The test team leader will meet with development and the project manager once every week as well. Additional meetings can be called as required for emergency situations.

Project Name: Learning Loft	Test Designed by: Debashish Dey
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Test Case ID: FR_1	Test Designed date:26 April 2021
Test Priority: High	Test Executed by:
Module Name: Login Session	Test Execution date:

Test Title: verify login with valid username and password
Description: Test website login page
Precondition (If any): User must have valid username and password

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the website 2. Enter username 3. Enter password 4. Click submit	Username: Abcd Password: 321@	User should login into the application	As expected,	Pass

Post Condition: User is validated with database and successfully login to account. The account session details are logged in the database.

Project Name: Learning Loft	Test Designed by: Debashish Dey
Test Case ID: FR_2	Test Designed date:24 April 2021
Test Priority: High	Test Executed by:
Module Name: Buying Gift card section	Test Execution date:

Test Title: verify User's currency to buy a service, verify users IP address is multiple or not!
Description: Test website "Gift card purchase" option on Shop page
Precondition (If any) User must have minimum 10,000 points.

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
<ol style="list-style-type: none"> 1. Go to Shop Page 2. Choose a gift card 3. Click on Purchase 	User's Point: 10,000 Ip address: 192.168.0.1 Same Ip Address: No	Users will be shown a text to check their Email.	As expected,	Pass

Post Condition: 10,000 points will be deducted from the User's currency. The Purchased data will be stored in a database.

Project Name: Learning Loft	Test Designed by: Debashish Dey
Test Case ID: FR_3	Test Designed date: 24 April 2021
Test Priority: High	Test Executed by:
Module Name: Homepage Session	Test Execution date:

Test Title: Verify subject & suggested subject, viewer name.
Description: Test website Home page (Quick View)
Precondition (If any): User must have valid username and password & successfully logged in.

Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
<ol style="list-style-type: none"> 1. Go to the website 2. Enter username 3. Enter password 4. Click submit 5. Go to the Homepage 6. Click Quick 	All Subject Name, Suggested subject Name, All viewer	All functions will work.	As expected,	Pass

Post Condition: User is validated with database and successfully login to account. The Homepage session details are logged in the database.

ITEM PASS/FAIL CRITERIA

The pass or fail criteria for a test item is dependent on the type of testing being performed on that item. A test case is deemed successful if it has found some problem or deviated from the expected results. A test case has failed if the expected output matches the observed output when implementing the given test case. These pass/fail criteria are listed within each specific test case specification. Specifications are given below:

Item	Pass Requirement	Result
Organize a quiz	A user must have 300 followers to organize a quiz	Pass
Quiz capacity	Maximum 30 students can participate on a quiz	Pass
Upload capacity	A user can upload maximum 4 videos a day	Pass
Upload Biography	A user can upload his biography video after reaching 100 followers	

Attend Quiz	To attend a quiz user must need to verify his choice of study	Pass
Be a Moderator	For being a moderator, a user must need to active in chat and minimum 500 followers	Pass
Sell a Product	A user with valid id and proper information can sell his product or service	Pass

TEST DELIVERABLES

Before reaching the market or the client, a software product goes through numerous stages of software development and testing, which help validate the effectiveness and quality of the product. During each of these phases, the team lead or manager prepares multifarious documents and reports for their team, which also help them to improve communication among team members and other stakeholders of the

project. These reports and documents are an integral part of software development/testing life cycle and are commonly known as test deliverables.

- Software Testing Strategy
- Software Testing Plan
- Software Test Scenarios and Test Cases
- Software Test Metrics
- Product Metrics
- Process Metrics
- Software Test Documentations
- Software Testing Reports
- Daily Test Status Reports
- Incident Reports
- Final (Test Project Closure) Test Status Report.

STAFFING AND TRAINING NEEDS

1.1 Staffing Needs

During the first quarter of the task the venture/test chief can assume the job of a full time Test engineer with low maintenance test architect to help with the audit and introductory arranging of the venture. After the underlying form has been done, the approval and check testing need 2- full time analyzer and one of them should be the individual associated with undertaking from the origins helping analyzer.

1.2 Training Needs

The Test administrator and Project Manager needs to team up with an organization workforce also, train on the inward working of a course portion stream and find out about accessible courses and essential course needs.

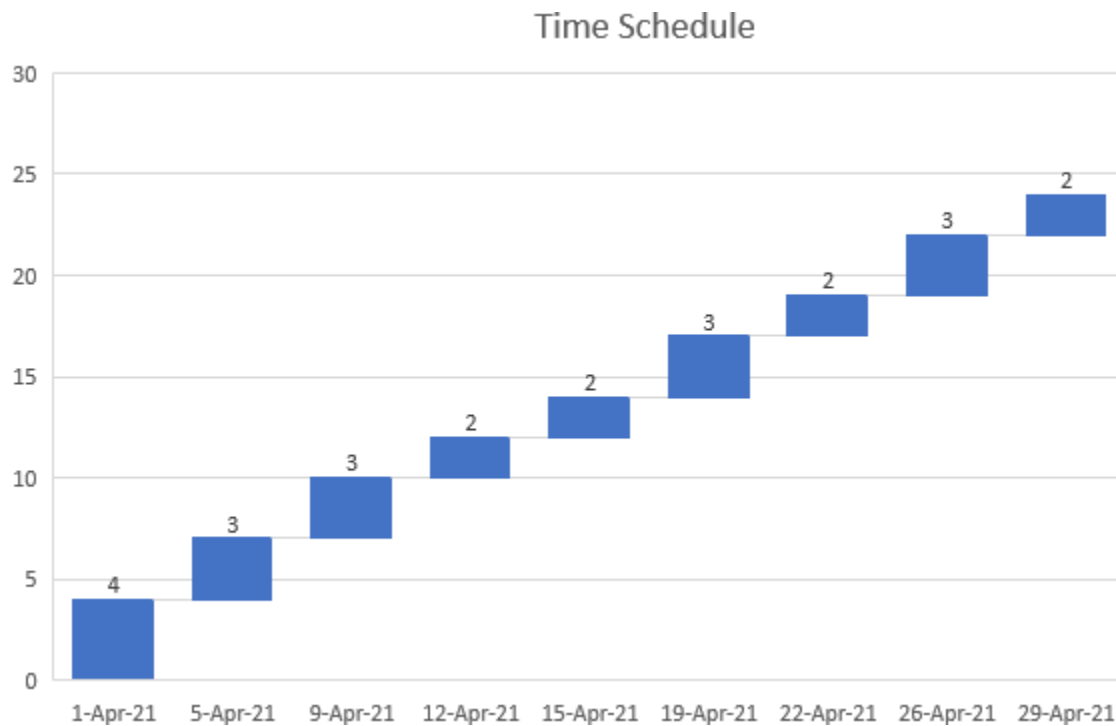
Responsibilities	Test Manager	Project Manager	Development Team	Test Team	Client
Acceptance Testing, Documentation and Execution	*	*	*	*	
System Testing, Documentation and Execution	*		*	*	

Integration Testing, Documentation and Execution	*		*	*	
Unit Testing, Documentation and Execution	*		*	*	
System Layout Review	*	*	*	*	*
User Interface Review	*	*	*	*	
Test Procedures and rules	*	*		*	
Data validation	*	*		*	*

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.



Planning Risks and Contingencies:

Sometimes it might happen that requirements of users are changed. In this project name and Gmail are fixed. A user can change his/her name by the validation of a moderator. But email can't be changed. But the other information can be changed by the user himself.

So, to prevent this, the developer team should keep some other features that can be added when needed. So, the developer team should suggest the customer fewer features. If any change of this test plan occurs then others risks might be added later. And there is a huge chance of simulating views. Because in this generation simulating view is getting easier. So, developers should make a cool down feature for every id. Which can prevent this type of illegal behavior. And not only that every moderator will verify the orders before sending products to the buyers.

APPROVALS

Approval	Personnel
Documentation and Execution	Test manager then project manager
System Structure	Development Team Leader and Project

	Manager
Acceptance testing	Project Manager and Test Manager
Unit testing	Test Manager
Test Procedures and rules	Project manager and Test Manager
Validation of data	Administration Personnel
Final Project completion	Project Manager then Test Manager then administration personnel
User Interface Review	Test Manager then Development Team then client