

American International University-Bangladesh (AIUB)

Department of Computer Science Faculty of Science & Technology (FST) Fall 22 23

Section: A
Software Quality Assurance and Testing

E-Commerce Website (Admin Panel)

A Report submitted By

| SN | Student Name | Student ID |
|----|---------------------------|------------|
| 1 | Anik, Abdullah All Rawaha | 18-37021-1 |
| 2 | Chowdhury, Hasebul Hassan | 18-37271-1 |
| 3 | Hossain, Md. Abdullah Al | 19-40083-1 |
| 4 | Bibi Mariom | 19-41280-3 |

Under the supervision of

ABHIJIT BHOWMIK

Associate Professor & Special Asst., Office of Student Affairs
Department of Computer Science
American International University-Bangladesh

Checked By Industry Personnel

| Checked by industry refsonner |
|-------------------------------|
| Name: S.M. Mushfiqur Rahman |
| Designation: |
| Company: |
| Sign: |

Software Test Plan

for

E-Commerce Website (Admin Panel)

Version 1.0 approved

Prepared by Anik, Abdullah All Rawaha Chowdhury, Hasebul Hassan Hossain, Md. Abdullah Al Bibi Mariom

American International University-Bangladesh

Checked By Industry Personnel

| Name: | | |
|--------------|--|--|
| Designation: | | |
| Company: | | |
| Sign: | | |

Date:

Table of Contents

| Re | vision History | 3 |
|----|----------------------------------|-----|
| 1. | TEST PLAN IDENTIFIER: RS-MTP01.3 | 4 |
| 2. | REFERENCES | 4 |
| 3. | INTRODUCTION | 4 |
| | Background to the Problem | |
| | Solution to the Problem | 4 |
| 4. | REQUEIREMNT SPECIFICATION | 5 |
| | 4.1 System Features | |
| | 4.2 System Quality Attributes | |
| | 4.3 System Interface | |
| | 4.4 Project Requirements | |
| 5. | FEATURES NOT TO BE TESTED | 11 |
| 6. | TESTING APPROACH | .11 |
| | 6.1 Testing Levels | 11 |
| | 6.2 Test Tools | |
| | 6.3 Meetings | 18 |
| 7. | TEST CASES/TEST ITEMS | .18 |
| 8. | ITEM PASS/FAIL CRITERIA | .24 |
| 9. | TEST DELIVERABLES | .24 |
| 10 | . STAFFING AND TRAINING NEEDS | .25 |
| 11 | RESPONSIBILITIES | .25 |
| 12 | . TESTING SCHEDULE | .26 |
| 13 | | .26 |
| | | .26 |
| | | |

Revision History

| Revision | Date | Updated by | Update Comments |
|----------|------------|---------------------------|-----------------|
| 0.1 | 2022.12.1 | Anik, Abdullah All Rawaha | First Draft |
| | | | |
| 0.2 | 2022.12.4 | Chowdhury, Hasebul Hassan | Second Draft |
| 0.3 | 2022.12.7 | Hossain, Abdullah Al | Third Draft |
| 0.4 | 2022.12.10 | Bibi Mariom | Forth Draft |

1. TEST PLAN IDENTIFIER: RS-MTP01.3

2. REFERENCES

o https://www.amazon.com/

3. INTRODUCTION

Background to the Problem

Websites are becoming a necessity in Business in the modern-day age, and it is necessary for the industries to provide its customers with necessary utilities. One of the main reasons business industries fails is because they had to spend a lot of time and money to get audiences in a wider perspective. Customers sometimes can't find the necessary products in the stores nearby. Sometimes they had to look for a long time for a particular product. Main Purpose is to create a software which will try to help the industries and well as the audiences/customers so that their money and time can be saved.

Solution to the Problem

Our System is a part of the overall software in which the admins will be able to operate the whole system. The key features are:

- 1. Admins can login to the system.
- 2. Admins can register other types of users such as Customer, Sales Manager, Buying Agent.
- 3. Admins can approve the registration of the users.
- 4. Admins can add products to the database.
- 5. Admins can monitor other users.

We are passionate that we want to provide first-rate service. Because customer happiness is our top goal, we also concentrate on our training sections, operational management sections, professional skill areas, and recruitment sections.

4. REQUEIREMNT SPECIFICATION

4.1 System Features

1. System Login

Functional Requirements

- 1.1 The admin can login into the software using his username and password
- **1.2** If the login is successful, the main home page in this software will be displayed.
- **1.3** If the user forgets the username and password, they can reset the password using their valid email address and phone number.
- **1.4** If the user input 3 times wrong password, the system will block the user account for an hour.

Priority Level: High

Precondition: Users must have valid username and password.

2. Registration

Functional Requirements

- **2.1** User must provide his username (if the name is available otherwise system will suggest some username or user can make his/her username unique), user password (password must be 6 digit or grater and it should contain some special character), address, date of, birth email, phone number for verification.
- **2.2** The users must wait for 30 minutes after registration in order to login.

Priority Level: High

Precondition: Admin must have the access to accept the registration.

3. Add Products

Functional Requirements

3.1 The products added by production manager must be added with necessary information and unique product id.

Priority Level: High

Precondition: Admin must approve the product before it becomes available to the customers

4. Delete Product

Functional Requirements

- **4.1** Product must be deleted automatically after the stock of the product is over.
- **4.2** Admin can delete any product necessary.

Priority Level: High

Precondition: Pop-up of an affirmation of deletion must be sent to the user before deleting the product.

5. Search Product & User

Functional Requirement

- **5.1** Searching of the product and user must be done in real time.
- **5.2** The system must show the results of the users and products considering that the keyword is a substring.

Precondition: The user must have an account.

4.2 System Quality Attributes

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

- o **Usability:** Any skilled user should be able to register and login to the system.
- o **Efficiency:** Each functional need must be fulfilled.
- o **Portability:** This will be capable of running properly on all the devices.
- Maintainability: If any issue locates or detects in the system then it will be possible to fix it.
- Correctness: Mentioned all features will be completed according to the preferences of the users.
- o **Accessibility:** It's a web-based software so it will be accessible from anywhere on the Internet.
- o **Reliability:** All features will perform in various working environments or devices.
- o **Flexibility:** Will flexible enough to modify in terms of any needs.
- Integrity/Security: 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 entering the system. Integrity comes with security.

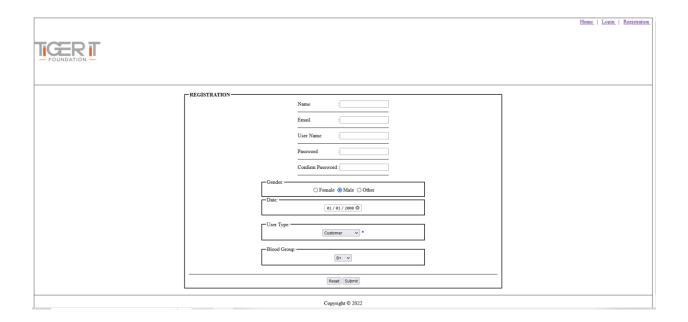
4.3 System Interface

Home Page

```
Welcome to Tiger IT

Copyright © 2017
```

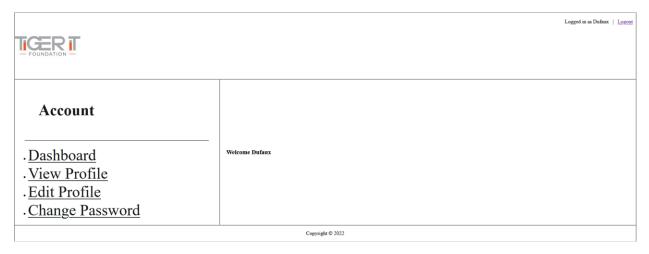
Registration



Login



Account Options



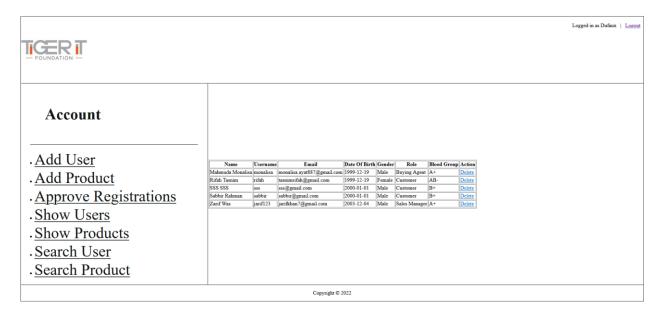
Dashboard



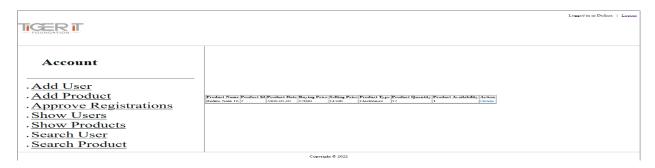
Add Product



Show Users



Show Products



Searching User with 'Name' as substring in real time

| a | | | | | | |
|------------------|----------|----------------------------|---------------|--------|-------------|---------------|
| Name | Username | Email | Date Of Birth | Gender | Blood Group | Role |
| Mahmuda Monalisa | monalisa | monalisa.ayat887@gmail.com | 1999-12-19 | Male | A + | Buying Agent |
| Rifah Tasnim | rifah | tasnimrifah@gmail.com | 1999-12-19 | Female | AB- | Customer |
| Sabbir Rahman | sabbir | sabbir@gmail.com | 2000-01-01 | Male | B+ | Customer |
| Zarif Was | jarif123 | jarifkhan7@gmail.com | 2003-12-04 | Male | A+ | Sales Manager |

Searching Products using list



| Electronics | v] | | | | | | |
|---------------|------------|--------------|---------------------|---------------|--------------|------------------|----------------------|
| Product Name | Product Id | Product Date | Buying Price | Selling Price | Product Type | Product Quantity | Product Availability |
| Redmi Note 10 | 2 | 2000-01-01 | 12000 | 14500 | Electronics | 12 | 1 |

Edit Profile Information



Change Password



4.4 Project Requirements

- o Total Budget is 1,00,000TK.
- o Total development time is 6months.
- o In the following project we will use PHP as programming language and Laravel framework.
- o Total Size of the project must be 500-1000MB.

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:

- o How to perform our application under low network that will not be tested.
- o There is feature in the application called "Approve Registration". It is currently under development.

6. TESTING APPROACH

6.1 Testing Levels

The testing for the project 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.

- O UNIT Testing: 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 function as 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.
- o **INTEGRATION Testing:** The second level of testing is integration testing. 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 the data transmission between these modules is accurate. At this level, we'll use strategies like bottom-up integration, and top-down integration.
- SYSTEM Testing: 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

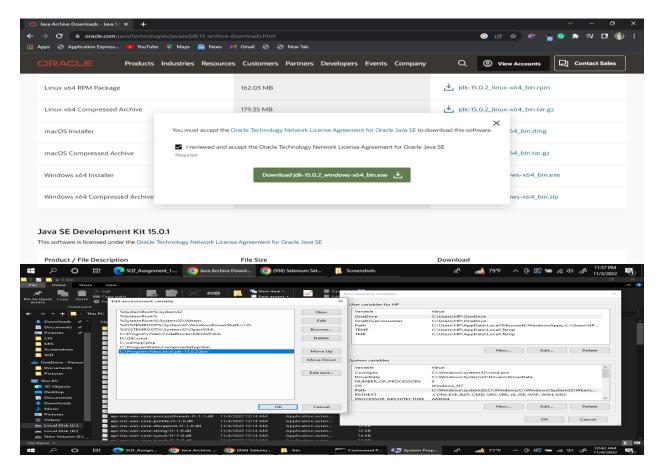
level. In addition to performing functional testing, our testing team also performs nonfunctional testing such as volume, load, and performance testing.

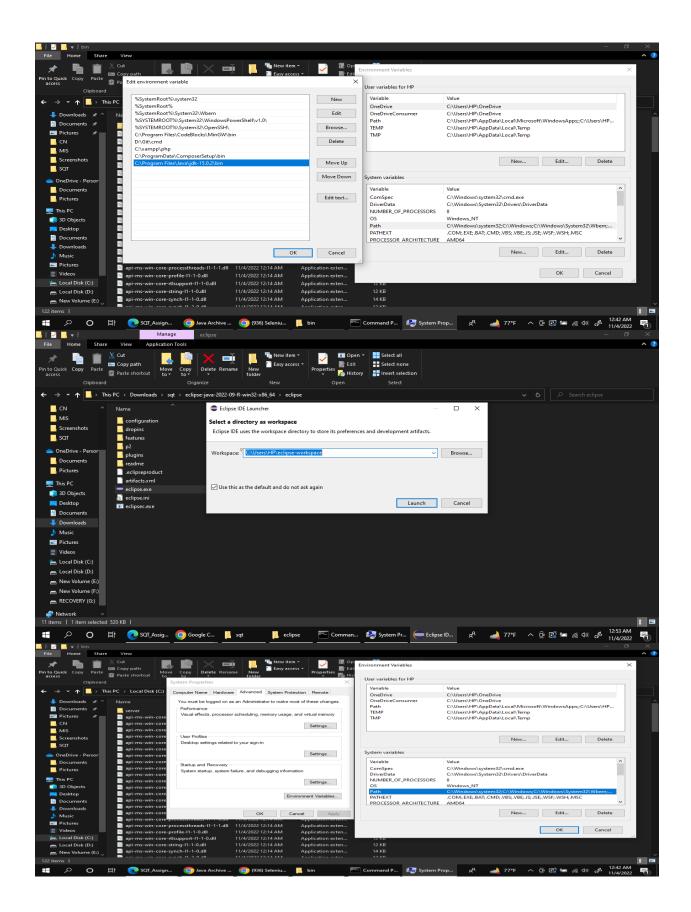
ACCEPTANCE Testing: We will move on to the acceptance testing level once our entire application has been completed and the first three levels have been tested. At this stage, the test team leader will work with the end user to evaluate our product. In essence, we will check the software's usability and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

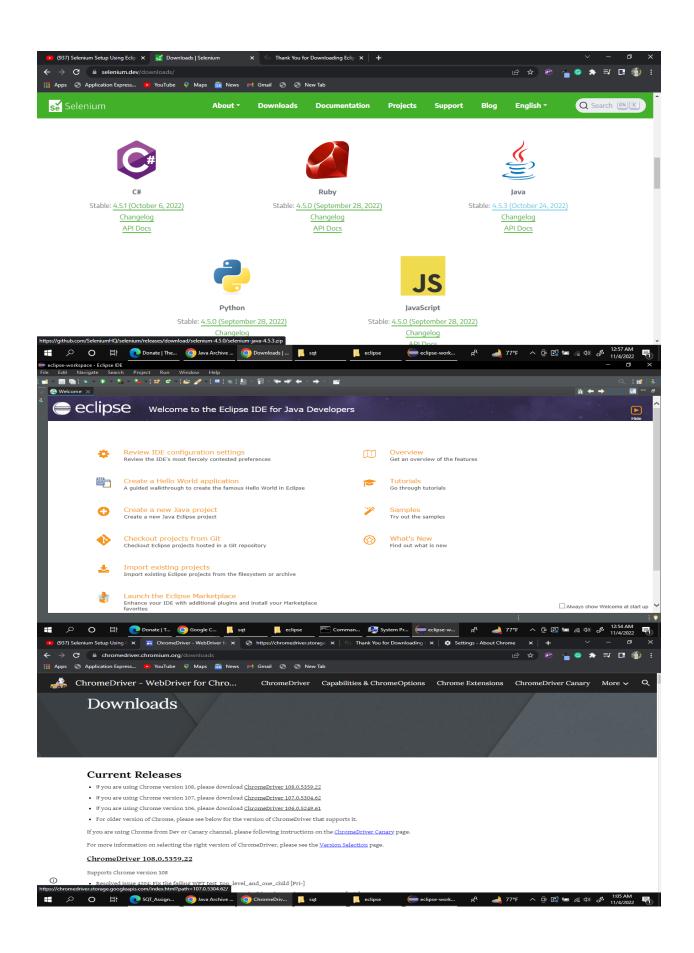
6.2 Test Tools

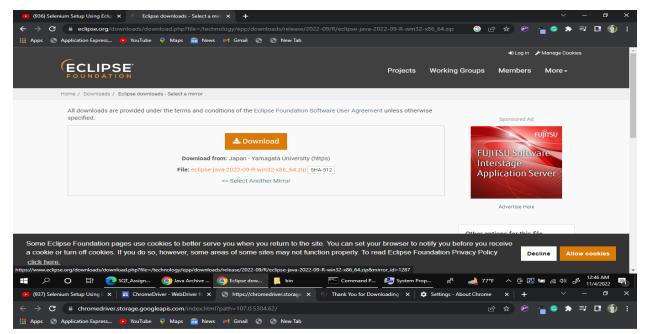
We will use Selenium as a testing tool to test our application.

Selenium: We will use selenium because of Automation testing. Our quality control engineer will conduct this testing part. First, we will do manual testing. After manual part we will conduct automation testing. Selenium is the most important tool for automation 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:



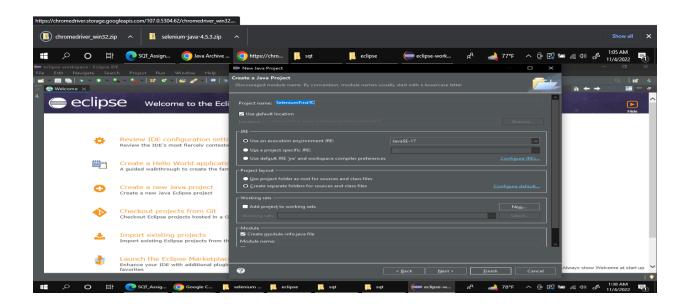


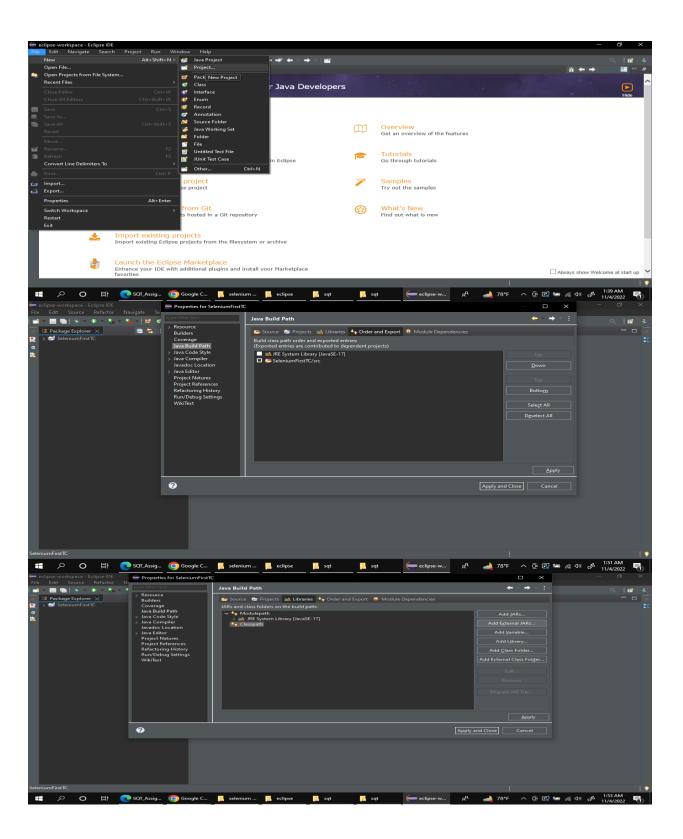


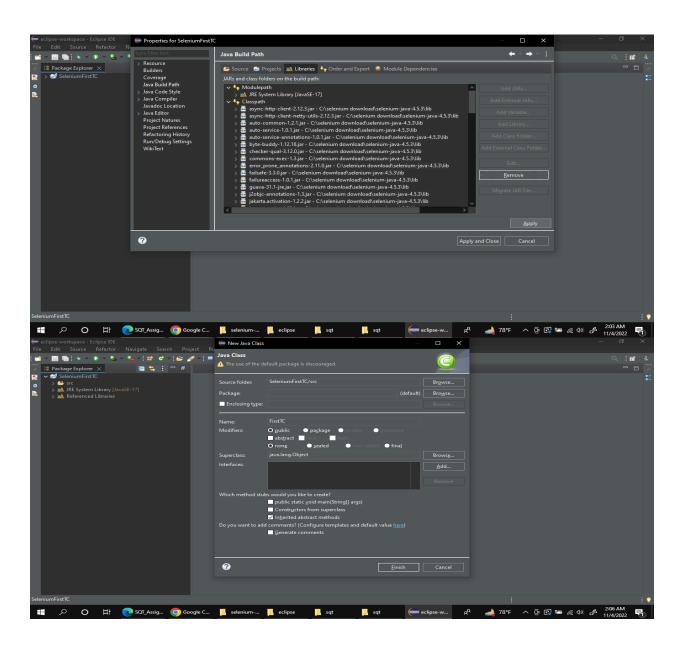


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| | <u>Name</u> | Last modified | Size | ETag |
|---------------------|----------------------------|---------------------|--------|----------------------------------|
| - | Parent Directory | | - | |
| | chromedriver_linux64.zip | 2022-10-25 12:20:56 | 7.26MB | 90d3353f17fcbd755626d528e94a1d9a |
| 252 252 252 252 255 | chromedriver_mac64.zip | 2022-10-25 12:20:57 | 8.41MB | 652c969a3b8d47e7fa9518d90b411fba |
| 18 | chromedriver_mac_arm64.zip | 2022-10-25 12:20:59 | 7.72MB | dba9920d41a8ec9fb847326ae0f68200 |
| | chromedriver_win32.zip | 2022-10-25 12:21:00 | 6.46MB | a5040d2731fe174c9a7b026edb3fe271 |
| | notes.txt | 2022-10-25 12:21:05 | 0.00MB | 936b74dab32b11addaffb0a624d9894a |







6.3 Meetings

The test team will meet once in every week to evaluate progress to date and to identify error trends and problems as early as possible. The test team leader will meet with development and the project manager once every two weeks as well. These two meetings will be scheduled on different weeks. Additional meetings can be called as required for emergency situations.

7. TEST CASES/TEST ITEMS

| | | | Test Designed By: Al Rawaha | nik, Abdullah All | |
|---|--|--|--------------------------------|-------------------|--|
| Test Case ID: FR_01 | | | Test Designed Date: 7/12/12 | | |
| Test Priority (Low, Medi | ium, High): High | Test Executed By: Anik, Abdullah All Rawaha | | | |
| Test Title: Verify login with valid username and password | | | Test Execution Date | : 7/12/12 | |
| Description: Test the we | ebsite login page | | | | |
| Precondition: User has | valid username and password | d | | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status(Pass/Fail) | |
| Go to the website Enter Username Enter Password Click Submit | Username: Dufaux Password: anik0909 | User should login in the application | As expected | Pass | |

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

| Project Name: E-Comm | erce Website (Admin Panel) | Test Designed By: Cl Hassan | howdhury Hasebul | |
|----------------------------|-------------------------------|--------------------------------|----------------------|-----------------------|
| Tost Casa ID: ED 02 | | | Tost Designed Date: | 7/12/12 |
| Test Case ID: FR_02 | | | Test Designed Date: | //12/12 |
| Test Priority (Low, Med | ium, High): High | | Test Executed By: Cl | nowdhury Hasebul |
| | | | Hassan | |
| Test Title: Verify login w | vith valid username and passv | word | Test Execution Date | : 7/12/12 |
| Description: Test the we | ebsite login page | | <u> </u> | |
| Precondition: User has | valid username and password | 1 | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status (Pass/Fail) |
| 1. Go to the website | Username: Anik0909 | User should not be | As expected | Pass |
| 2. Enter Username | Password: anik0909 | able to login in the | | |
| 3. Enter Password | | application | | |
| 4. Click Submit | | | | |
| Post Condition: User is | validated with database and o | couldn't successfully login | in the account. | |

| Project Name: E-Commerce Website (Admin Panel) | | | Test Designed By: Hossain Md Abdullah Al | | |
|---|-----------------------|-------------------|--|-------------------|--|
| | | | | | |
| Test Case ID: FR_03 | | | Test Designed Date | : 7/12/12 | |
| Test Priority (Low, Med | ium, High): Medium | | Test Executed By: H | lossain Md | |
| | | | Abdullah Al | | |
| Test Title: Verify login with valid username and password | | | Test Execution Date: 7/12/12 | | |
| Description: Test the w | ebsite login page | | | | |
| Precondition: User has | valid username and pa | ssword | | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status(Pass/Fail) | |
| 1. Go to the website | Username: | The system should | As expected | Pass | |
| 2. Enter Username | Password: | show Username | | | |
| 3. Enter Password | | Required and | | | |
| 4. Click Submit | | Password Required | | | |

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

| Project Name: E-Commerce Website (Admin Panel) | | | Test Designed By: Bibi Mariom | | |
|---|------------------------------|---------------------|-------------------------------|-------------------|--|
| Test Case ID: FR_04 | | | Test Designed Date: | 8/12/12 | |
| Test Priority (Low, Med | ium, High): High | | Test Executed By: Bi | bi Mariom | |
| Test Title: Verify login w | vith valid username and pass | Test Execution Date | : 8/12/12 | | |
| Description: Test the we | ebsite login page | | | | |
| Precondition: User has | valid username and password | d | | | |
| 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 User should not be able to login in the application As expected Pass Password: anik0909 application | | | | | |
| Post Condition: User is validated with database and successfully login in the account. The account session details are logged in the database. | | | | | |

| Project Name: E-Commerce Website (Admin Panel) | Test Designed By: Anik, Abdullah All Rawaha |
|--|--|
| Test Case ID: FR_05 | Test Designed Date: 10/12/12 |
| Test Priority (Low, Medium, High): High | Test Executed By: Anik, Abdullah All Rawaha |
| Test Title: Register a user with necessary information | Test Execution Date: 10/12/12 |
| Description: Test the website registration page | <u>'</u> |
| Precondition: A user can create only one account with a username | and email. |

| Test Steps | Test Data | Expected Results | Actual Results | Status(Pass/Fail) |
|------------------------|--------------------------|------------------------|----------------|-------------------|
| | | | | |
| 1. Go to the website | Name: Rawaha Anik | The system shouldn't | As expected | Pass |
| 2. Enter Name | Email: | reload the page as the | | |
| 3. Enter Email | rawaha.anik.1@gmail.com | passwords didn't | | |
| 4. Enter Username | Username: Dufaux | match | | |
| 5. Enter Password | Password: anik123 | | | |
| 6. Confirm Password | Confirm Password: anik23 | | | |
| 7. Select Gender | Gender: Male | | | |
| 8. Select Birthdate | Birthdate: 15-09-1999 | | | |
| 9. Select User type | Blood Group: B+ | | | |
| 10. Select Blood Group | | | | |
| 11. Click Submit | | | | |
| | | | | |

| Project Name: E-Commerce Website (Admin Panel) | | Test Designed By: Ch Hassan | nowdhury Hasebul | |
|---|----------------------------|--|-----------------------------|-------------------|
| Test Case ID: FR_06 | | Test Designed Date: | est Designed Date: 10/12/12 | |
| Test Priority (Low, Medium, High): High | | Fest Executed By: Anik, Abdullah All Rawaha | | |
| Test Title: Register a user with necessary information | | | Test Execution Date | 10/12/12 |
| Description: Test the website registration page | | | | |
| Precondition: A user can create only one account with a username and email. | | sername and email. | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status(Pass/Fail) |
| 1. Go to the website | Name: Rawaha Anik | The system shouldn't | : As expected | Pass |
| 2. Enter Name | Email: | add any user in the | | |
| 3. Enter Email | rawaha.anik.1@gmail.com | database as the | | |
| 4. Enter Username | Username: Dufaux | username/ email | | |
| 5. Enter Password | Password: tanim123 | already exists | | |
| 6. Confirm Password | Confirm Password: tanim123 | | | |

| 7. Select Gender | Gender: Male | | |
|------------------------|-----------------------|--|--|
| 8. Select Birthdate | Birthdate: 15-09-1999 | | |
| 9. Select User type | Blood Group: B+ | | |
| 10. Select Blood Group | | | |
| 11. Click Submit | | | |
| | | | |

| Project Name: E-Commerce Website (Admin Panel) | Test Designed By: Hussain, Md. Abdullah Al |
|--|---|
| Test Case ID: FR_07 | Test Designed Date: 10/12/12 |
| Test Priority (Low, Medium, High): High | Test Executed By: Bibi Mariom |
| Test Title: Register a user with necessary information | Test Execution Date: 10/12/12 |

Description: Test the website registration page

Precondition: A user can create only one account with a username and email.

| Test Steps | Test Data | Expected Results | Actual Results | Status(Pass/Fail) |
|------------------------|---------------------------|-------------------------|-----------------|-------------------|
| | | | | |
| 1. Go to the website | Name: Arif Billah Saad | The system should not | The system | Pass |
| 2. Enter Name | Email: saad@gmail.com | create a user in the | couldn't create | |
| 3. Enter Email | Username: saad | database as the | a user | |
| 4. Enter Username | Password: saad123 | password is less than 8 | | |
| 5. Enter Password | Confirm Password: saad123 | characters | | |
| 6. Confirm Password | Gender: Male | | | |
| 7. Select Gender | Birthdate: 15-09-1999 | | | |
| 8. Select Birthdate | Blood Group: B+ | | | |
| 9. Select User type | | | | |
| 10. Select Blood Group | | | | |
| 11. Click Submit | | | | |
| 11. Click Judillit | | | | |

Post Condition: The user's information must be validated such that the username/email doesn't exist in the database. The password must be matched with the confirm password.

| Project Name: E-Commerce Website (Admin Panel) | | Test Designed By: Hussain, Md. Abdullah Al | | |
|--|--|--|----------------------|-------------------|
| Test Case ID: FR_08 | | | Test Designed Date: | 10/12/12 |
| Test Priority (Low, Medium, High): High | | Test Executed By: Hussain, Md. Abdullah Al | | |
| Test Title: Register a user | with necessary information | | Test Execution Date: | 10/12/12 |
| Description: Test the webs | site registration page | | | |
| Precondition: A user can c | reate only one account with a | username and email. | | |
| Test Steps | Test Data | Expected Results | Actual Results | Status(Pass/Fail) |
| 1. Go to the website 2. Enter Name 3. Enter Email 4. Enter Username 5. Enter Password 6. Confirm Password 7. Select Gender 8. Select Birthdate 9. Select User type 10. Select Blood Group 11. Click Submit | Name: Arif Billah Saad Email: saad@gmail.com Username: saad Password: saad1234 Confirm Password: saad1234 Gender: Male Birthdate: 15-09-1999 Blood Group: B+ | The system shouldn't create a user as the password doesn't contain any special characters. | As expected | Pass |

| Project Name: E-Commerce Website (Admin Panel) | Test Designed By: Chowdhury Hasebul Hassan |
|--|---|
| Test Case ID: FR_09 | Test Designed Date: 10/12/12 |
| Test Priority (Low, Medium, High): High | Test Executed By: Chowdhury Hasebul Hassan |
| Test Title: Register a user with necessary information | Test Execution Date: 10/12/12 |
| Description: Test the website registration page | |

| Precondition: A user can | create only one account with a | username and email. | | |
|--------------------------|--------------------------------|----------------------|-----------------|-------------------|
| Test Steps | Test Data | Expected Results | Actual Results | Status(Pass/Fail) |
| | | | | |
| 1. Go to the website | Name: Musanna Nafis | The system should | The system | Fail |
| 2. Enter Name | Email: nafis@gmail.com | create a user in the | couldn't create | |
| 3. Enter Email | Username: nafis | database | a user in the | |
| 4. Enter Username | Password: nafis1234@ | | database | |
| 5. Enter Password | Confirm Password: | | | |
| 6. Confirm Password | nafis1234@ | | | |
| 7. Select Gender | Gender: Male | | | |
| 8. Select Birthdate | Birthdate: 15-09-1999 | | | |
| 9. Select User type | Blood Group: B+ | | | |
| 10. Select Blood Group | | | | |
| 11. Click Submit | | | | |
| | | | | |

8. ITEM PASS/FAIL CRITERIA

- Unit test done in each 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

- o 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.
- o In the unit test strategy part, we must assess the system that will be tested.
- O 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 a copy of the exemplary artwork.
- O 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.
- O 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

It is preferred that there will be at least one (1) full time tester assigned to the project for the system/integration and acceptance testing phases of the project. This will require assignment of a person part time at the beginning of the project to participate in reviews etc... and approximately four months into the project they would be assigned full time. If a separate test person is not available the project manager/test manager will assume this role. In order to provide complete and proper testing the following areas need to be addressed in terms of training.

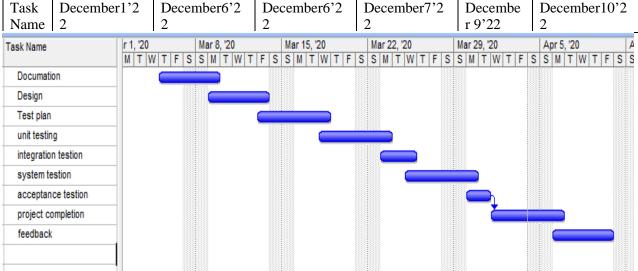
The developers and tester(s) will need to be trained on the basic operations of the interface. Prior to final acceptance of the project the operations staff will also require complete training on the communications process.

11. RESPONSIBILITIES

| | тм | 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.



13. PLANNING RISKS AND CONTINGENCIES

Every week, the quality assurance team leader will set up a meeting to assess the progress being made on our application. We will also regularly perform code reviews and code walks through to find errors and bugs as soon as possible. Each week our project manager will meet with our quality assurance team 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.

14. APROVALS

| Muhammad Asfaqur Rahman | |
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