

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

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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

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Date:

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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.

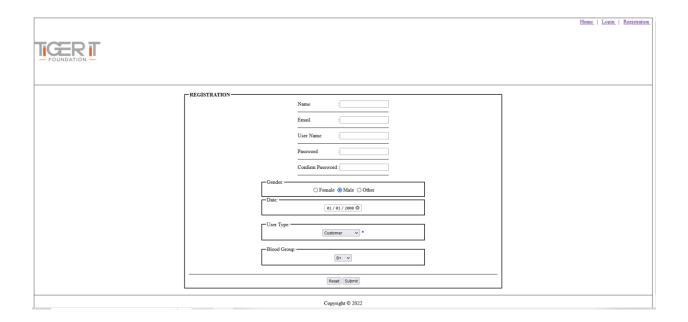
4.3 System Interface

Home Page

```
Welcome to Tiger IT

Copyright © 2017
```

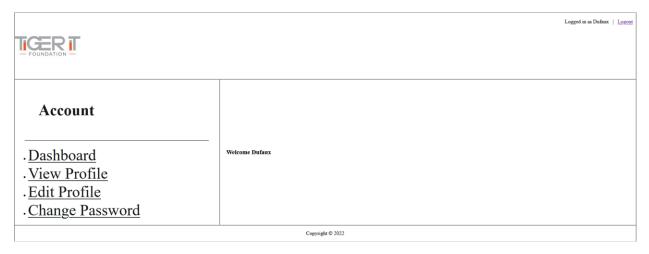
Registration



Login



Account Options



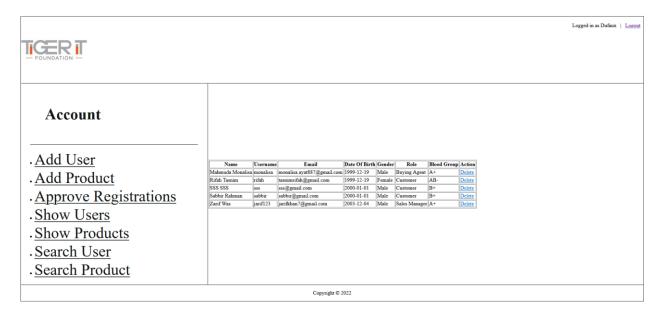
Dashboard



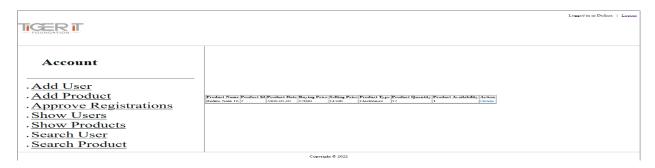
Add Product



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

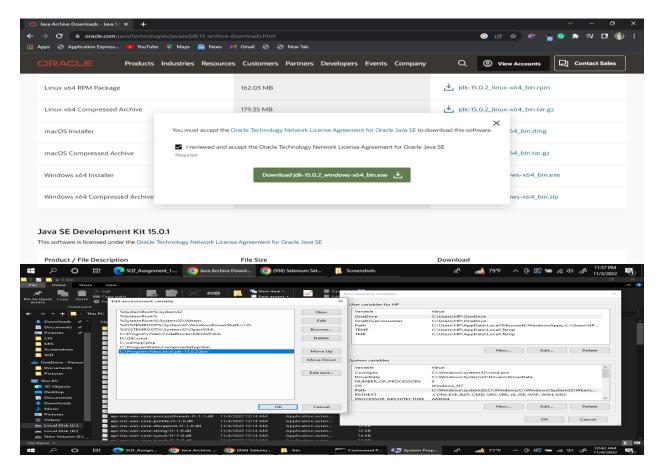
level. In addition to performing functional testing, our testing team also performs nonfunctional testing such as volume, load, and performance testing.

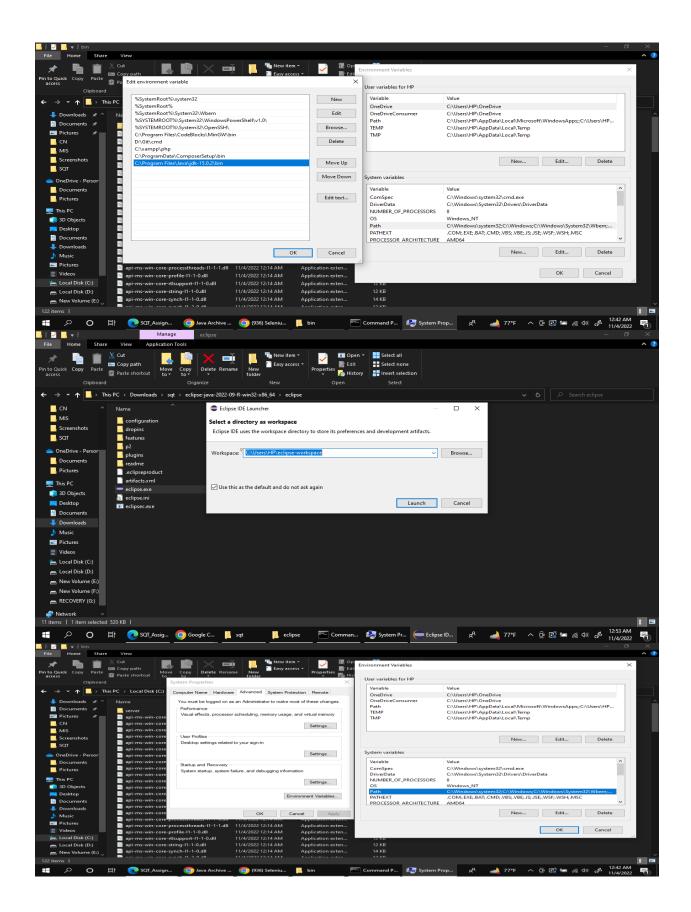
ACCEPTANCE Testing: We will move on to the acceptance testing level once our entire application has been completed and the first three levels have been tested. At this stage, the test team leader will work with the end user to evaluate our product. In essence, we will check the software's usability and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

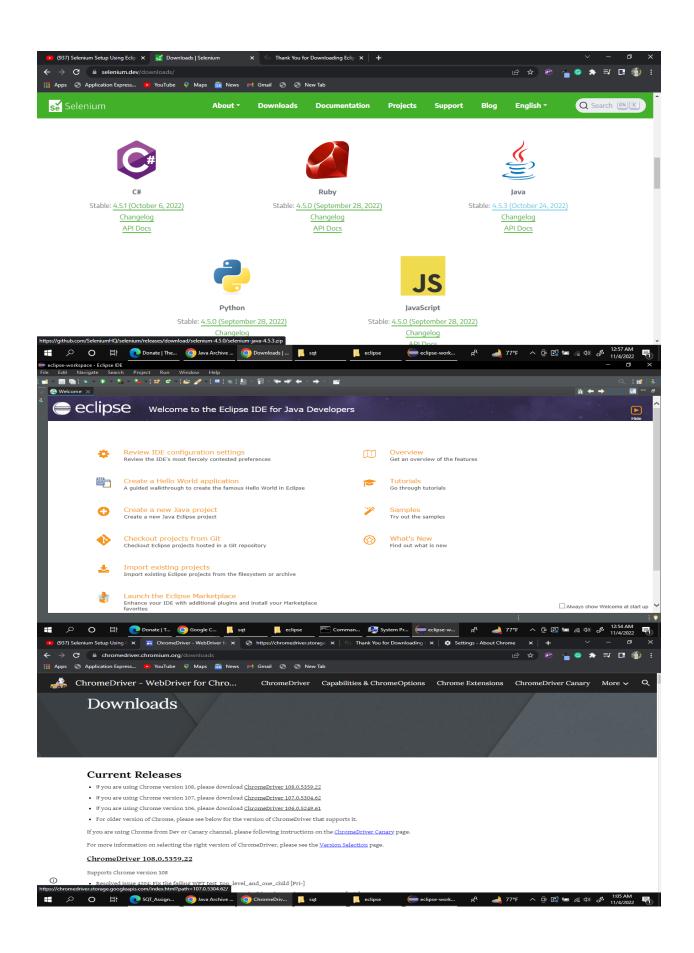
6.2 Test Tools

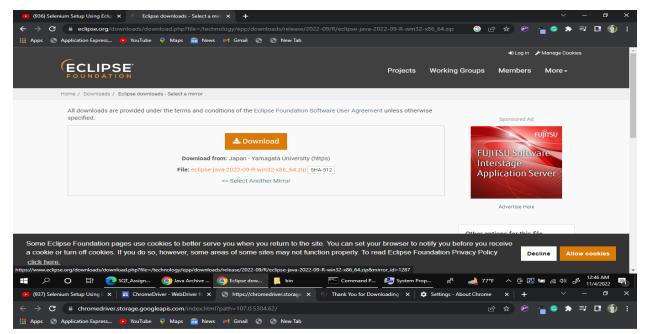
We will use Selenium as a testing tool to test our application.

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:



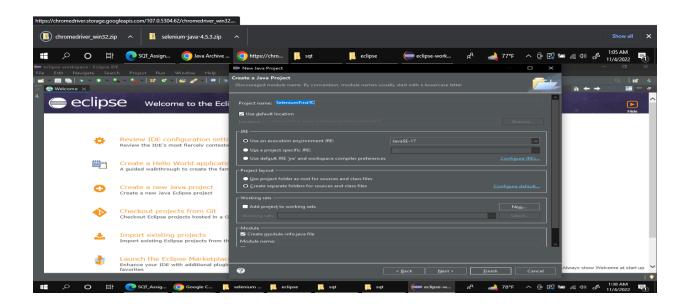


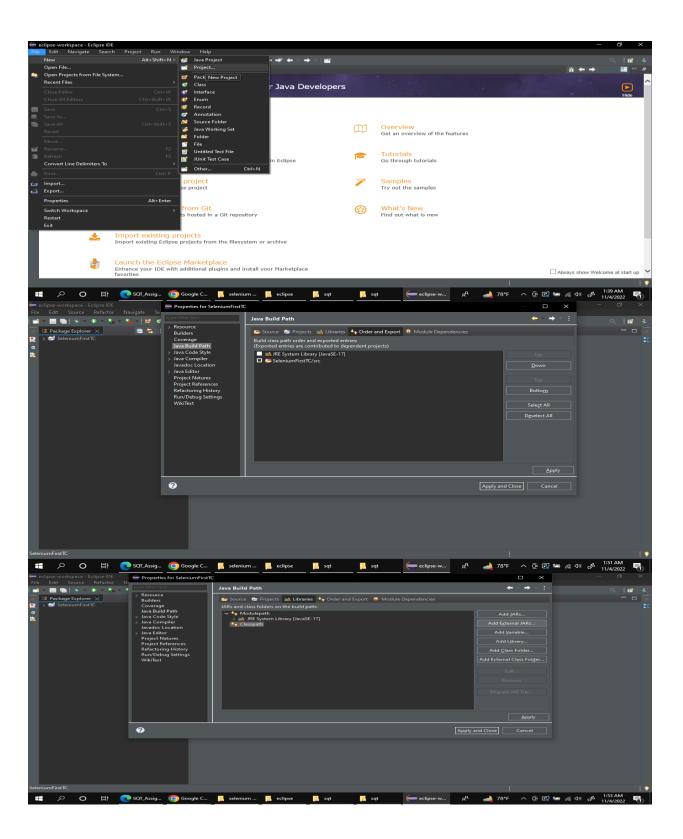


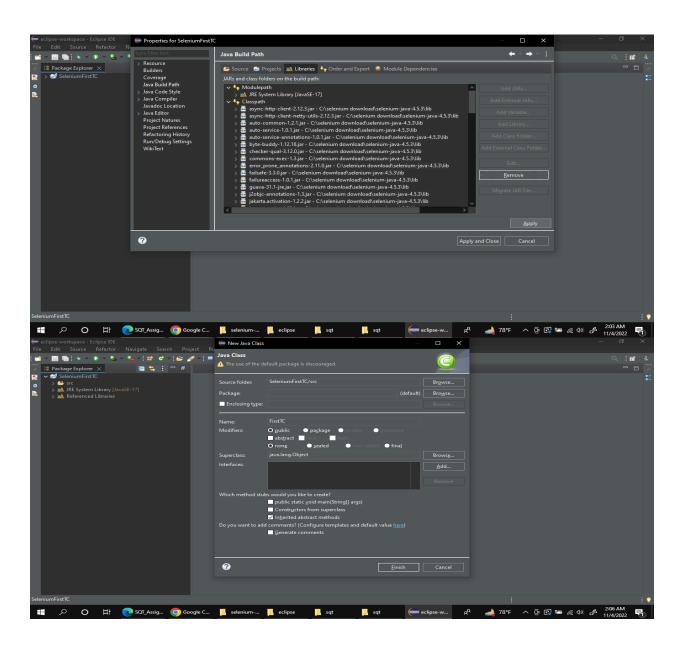


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252 252 252 252 255	chromedriver_mac64.zip	2022-10-25 12:20:57	8.41MB	652c969a3b8d47e7fa9518d90b411fba
	chromedriver_mac_arm64.zip	2022-10-25 12:20:59	7.72MB	dba9920d41a8ec9fb847326ae0f68200
	chromedriver_win32.zip	2022-10-25 12:21:00	6.46MB	a5040d2731fe174c9a7b026edb3fe271
	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-Commerce Website (Admin Panel)			Test Designed By: Chowdhury Hasebul Hassan		
Test Case ID: FR_02		Test Designed Date: 7/12/12			
Test Priority (Low, Medium, High): High			Test Executed By: Chowdhury Hasebul Hassan		
Test Title: Verify login w	vith valid username and passv	vord	Test Execution Date	: 7/12/12	
Description: Test the we	ebsite login page				
Precondition: User has	valid username and password	I			
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)	
 Go to the website Enter Username Enter Password Click Submit 	Username: Anik0909 Password: anik0909	User should not be able to login in the application	As expected	Pass	
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: H	<mark>lossain Md</mark>	
			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 v	vith valid username an	Test Execution Date	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	word	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 Username: Mariom Password: anik0909 User should not be able to login in the 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: Chowdhury Hasebul Hassan		
Test Case ID: FR_06		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				
Precondition: A user can o	reate only one account with a u	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_0	e 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 t	he website registration page			
Precondition: A us	er can create only one accour	t with a username and email.		
Test Steps	Test Data	Expected Results	Actual Results	Status(Pass/Fail)

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				

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.

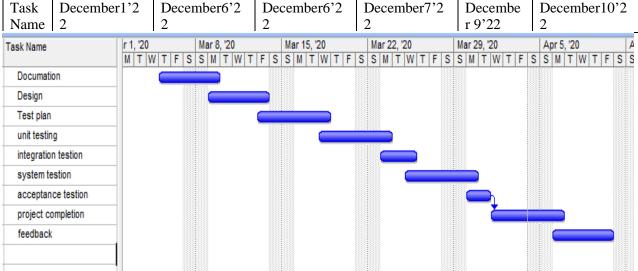
The developers and tester(s) will need to be trained on the basic operations of the interface. Prior to final acceptance of the project the operations staff will also require complete training on the communications process.

11. RESPONSIBILITIES

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

12. TESTING SCHEDULE

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



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	