

American International University-Bangladesh (AIUB)  
Department of Computer Science  
Faculty of Science &Technology (FST)  
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Section: A  
Software Quality Assurance and Testing

Online Shopping System

A Report submitted

By

|  |  |  |
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Software Test Plan

for

Online shopping system

Version 1.0 approved

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American International University of Bangladesh

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**Checked By Industry Personnel**

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Date:

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# Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| Revision | Date | Updated by | Update Comments |
| 0.1 | 2022.08.03 | Md. Jahidul Islam | First Draft |
| 0.2 | 2022.08.05 | Md. Mehedi Hasan |  |
| 0.3 | 2022.08.06 | Nusrat Jahan | Second Draft |
| 04 | 2022.08.08 | Joya Alam |  |
| 05 | 2022.08.09 | Md. Jahidul Islam | Third Draft |
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|  |  |  |  |

# TEST PLAN IDENTIFIER: RS-MTP01.3

# REFERENCES

* Software Requirement Specification (SRS) Document
* High Level Design Document
* Details Design Document
* Low Level Design Document

# INTRODUCTION

## Background to the Problem

Many business owners sell their products and many people buy their products but sometimes business owners did not track their products, so sometimes businesses are lost business owners and also the buyer wants to fulfill their track system.  The role of e-commerce in both wholesale and retail trade is continuously growing. Our objective is to make sure that nobody in any corner of our country has to be deprived of an online shopping system.

## Solution to the Problem

In our busy lives, everyone is slowly getting used to online purchasing of any type of product and goods they need. Many people are earning by selling their products online on a website or application. So, in order to make this whole process easier, an online-based system will do the job. Through this system, customers can order their desired products systematically, sellers can keep track of the products and the owner of the business can keep track of the sales and profits. To make shopping online easier, we have come up with our Online Shopping.

# REQUEIREMNT SPECIFICATION

## System Features

**4.1.1 User Registration**

* 1. The software will provide an interface seller or customer to sign in. Beside the button new sign-up seller and sign up customer as option.
  2. When the sign-up option is pressed then the user will be taken to a new page where there will be a form that needs to be filled.
  3. The user will need to provide his or her name, email address. As well as 10 unique credentials that are the username and password for that user or seller account.

**Priority Level**: High  
**Precondition:** Users must have a valid email address and provide authentic personal information.

**4.1.2 Login Interface**

2.1 The software will provide an interface for the user to login to the system using their username and password.

2.2 After a successful login attempt the user will be taken to the home page of his or her account.

**Priority Level**: High  
**Precondition:** User must have a valid user ID and password.

**4.1.3 Account Management:**

3.1 Here we will be updating some dummy account information to see

whether the system updates this information correctly.

3.2 This account also managed buyer or seller manage their account.

3.3 Update their account Information successfully.

3.4 Valid email Address.

**Priority Level**: Medium  
**Precondition:** Admin must be checked by the seller or customer.

**4.1.4 Product Browsing:**

4.1 Here See that search option work properly or not.

4.2 Input some value or product names.

4.3 Matching product showing or not.

**Priority Level**: Medium  
**Precondition:** User must be log in and browsing our products.

**4.1.5** **Product Ordering:**

5.1 Add Product in cart.

5.2 Check the ordering process.

5.3 Fill up all section

5.4 Generate in pdf slip format

**Priority Level**: High  
**Precondition:** Select the product.

**4.1.6 Sales Report Generation:**

6.1 Input the Seller name.

6.2 Time spectrum of our sales report.

6.3 system can give us the report correctly

**Precondition:** Sales their product.

## System Quality Attributes

1. **Availability**

System should be up and running 99% of the time.

**Priority Level : High**

**Preconditions(s) : None**

**Cross-reference : None**

1. **Integrity**

a. Users should not be able to access other user’s accounts.

b. User emails must be authenticated before signing up.

c. Users should have a least amount of money before they can add their

account details.

**Priority Level : High**

**Preconditions(s) : None**

**Cross-reference : None**

**3. Maintainability**

1. Any kind of maintenance that directly hampers user experience should be completed under 40min to 1hour.

**Priority Level : High**

**Preconditions(s) : None**

**Cross-reference : None**

**4**.**Robustness**

a.System should be able to recover state of current information when

user re-runs the application after an accidental exit.

1. System should be able to save states before it crashes and resume when user re-runs the application.

**Priority Level : High**

**Preconditions(s) : None**

**Cross-reference : None**

**5. Usability**

a. User interfaces should be self-explanatory so that new users can feel right at

home without going through tedious documentation and other user guides.

**Priority Level : High**

**Preconditions(s) : None**

**Cross-reference : None**

**6. Interoperability**

a. System should be implementable in different platforms like Windows and Linux or mac systems.

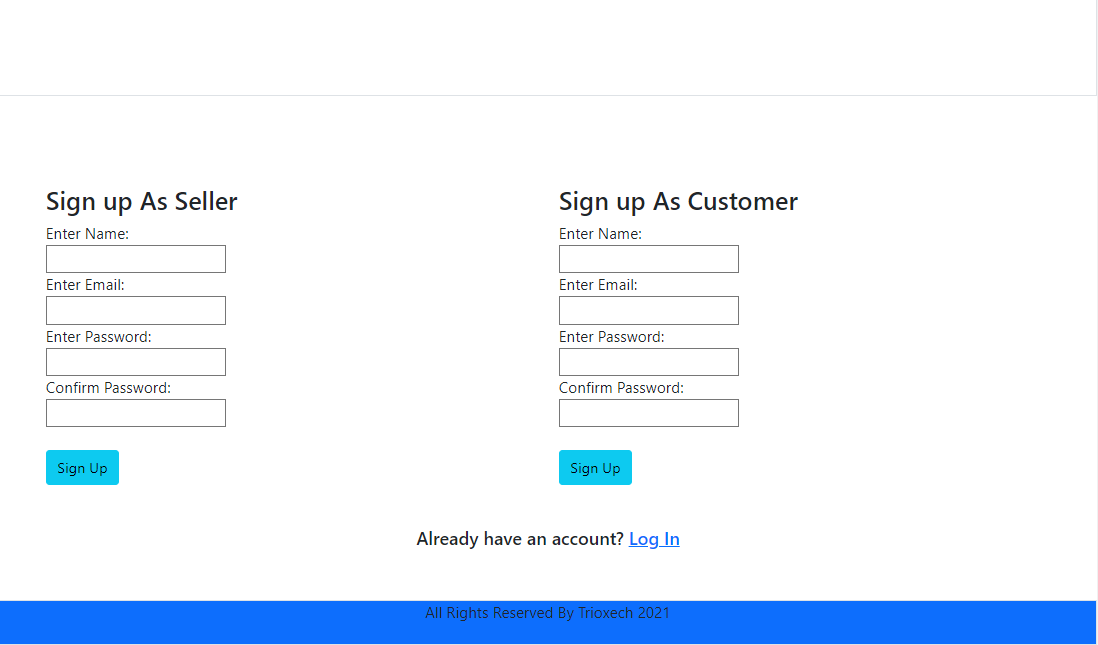
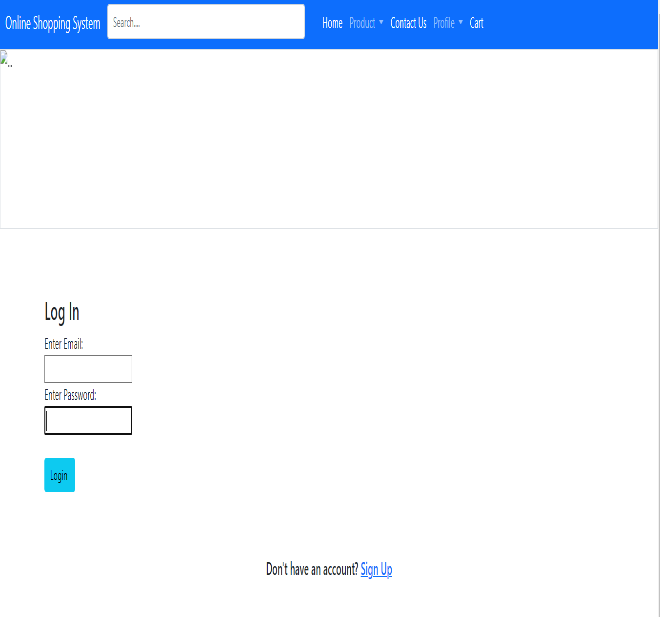
**Priority Level : High**

**Preconditions(s) : None**

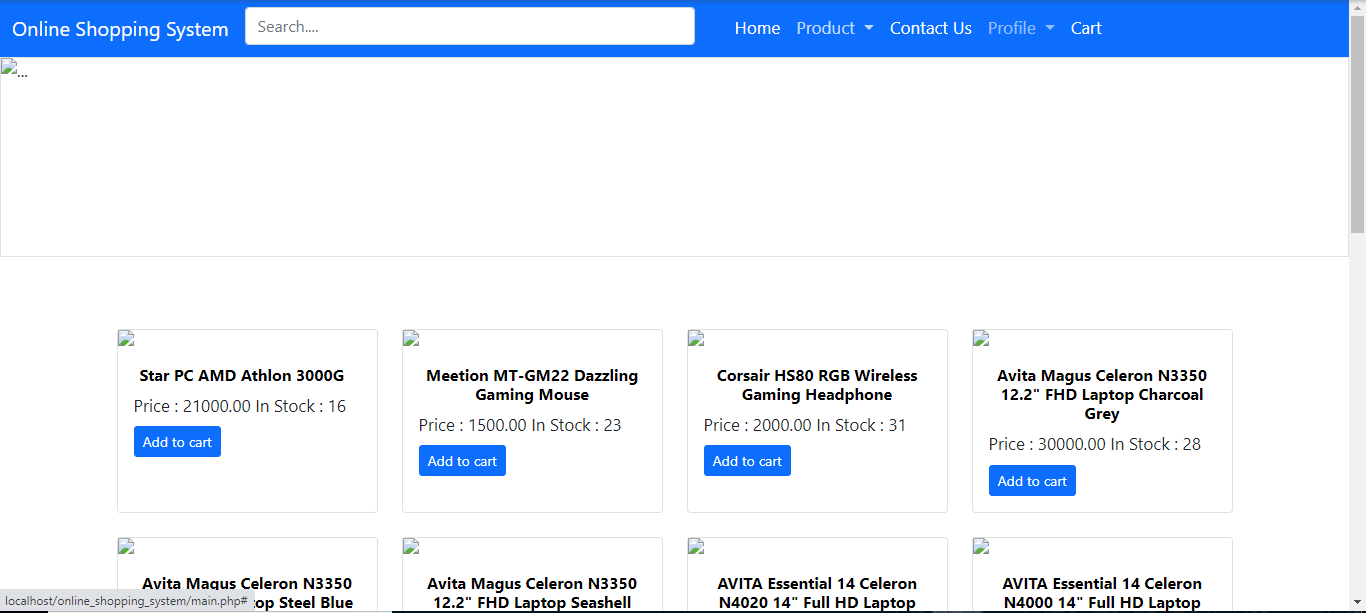
**Cross-reference : None**

## System Interface

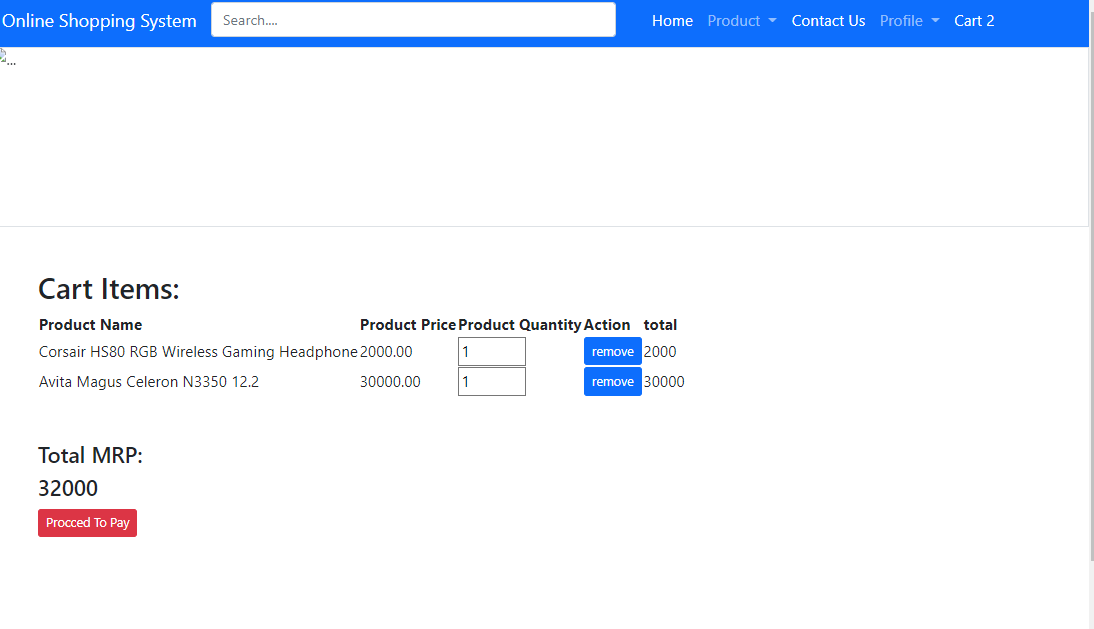
Web design:

1.Sign up page 2. Login Page



3. product list



4. Cart list

## Project Requirements

1. A working solution should be read by 5 weeks.
2. Developers are used to preferred to use visual studio for code testing, but can use another editor also.
3. Git will be used for default version control system and code managing tool
4. Unit testing will be completed using Selenium
5. Estimated budget for the project is $1500

# FEATURES NOT TO BE TESTED

The following is a list of the areas that will not be tested accordingly to our test plan.

* Product browsing
* Sales report generation
* Banning account by Admin
* Adding new seller by Admin

# TESTING APPROACH

## Testing Levels

The testing for the proposed system will include of Unit, System/Integration and Acceptance test levels. Most testing will be done by the test manager as well as the development teams will also participate.

* **UNIT** Testing will be done by the developer and will be approved by the development team leader. Proof of unit testing (test case list, sample output, data printouts, defect information) must be provided by the programmer to the team leader before unit testing will be accepted and passed on to the test person. All unit test information will also be provided to the test person.
* **SYSTEM/INTEGRATION** Testing will be performed by the test manager and development team leader with assistance from the individual developers as required. No specific test tools are available for this project. Programs will enter into System/Integration test after all critical defects have been corrected.
* **ACCEPTANCE** Testing will be performed by the actual end users with the assistance of the test manager and development team leader.

## Test Tools

The only test tools to be used are the standard AS/400 provided utilities and commands.

* The Program Development Manager (PDM) will be used as the source version configuration management tool in conjunction with the in-house check-in/check-out control utility. The check-in/out utility is part of each developer’s standard AS/400 access menu.
* The initial prototypes for the new screens will be developed using the AS/400 Screen Design Aid (SDA). The initial layout and general content of the screens will be shown to the sales administration staff prior to proceeding with testing and development of the screens.
* Selenium can be used during the course of development for unit testing on the go by the developers.

## Meetings

The test team will meet once every two weeks 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.

# TEST CASES/TEST ITEMS

1. **Account Registration**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Project Name: Online Shopping System | | | Test Designed by: Md. Jahidul Islam | | |
| Test Case ID: T\_1 | | | Test Designed date: 2-8-22 | | |
| Test Priority (Low, Medium, High): High | | | Test Executed by: Nusrat Jahan | | |
| Module Name: Account registration | | | Test Execution date: 6-8-22 | | |
| Test Title: Verify user identity | | |  | | |
| Description: Test Registration page. If existing, verify if signing up with valid email and password and see if it works. | | |  | | |
| Precondition (If any): User must have entered valid email address. | | | | | |
| Test Steps | Test Data | Expected Results | | Actual Results | Status (Pass/Fail) |
| 1. Go to the website 2. Click sign up. 3. Enter Valid E-mail and password 4. Click submit 5. Check email for OTP. 6. Enter OTP. | Username: Hasan341@gmail.com  Password: ab134564312  OTP:3445 | User should be registered. | | As expected, | Pass |
| Post Condition: User is registered. | | | | | |

**2.Account Login Session**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Project Name: Online Shopping System | | | Test Designed by: Md, Jahidul Islam | | |
| Test Case ID: T\_2 | | | Test Designed date: 2-8-22 | | |
| Test Priority (Low, Medium, High): High | | | Test Executed by: Nusrat Jahan | | |
| Module Name: Account Login Session | | | Test Execution date: 6-8-22 | | |
| Test Title: Verify login with valid username and password | | |  | | |
| Description: Test login page. See if, user login with valid username and password and it works. | | |  | | |
| 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: Hasan341@gmail.com  Password: ab134564312 | User should be able to login to the system. | | 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: Online Shopping System | | | Test Designed by: Md. Mehedi Hasan | | |
| Test Case ID: T\_3 | | | Test Designed date: 6-8-22 | | |
| Test Priority (Low, Medium, High): High | | | Test Executed by: Joya Alam | | |
| Module Name: Account Management | | | Test Execution date: 10-8-22 | | |
| Test Title: Verify login with invalid username and password | | |  | | |
| Description: Test login page. See if, user login with invalid username and password and it works. | | |  | | |
| Precondition (If any): | | | | | |
| 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: Jahid563@yahoo.com  Password: hj9985674 | User should not be able to login to the system. | | As expected, | Pass |
| Post Condition: User is invalidated with database and can’t successfully login to an account. | | | | | |

**3.Account management**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Project Name: Online Shopping System | | | Test Designed by: Joya Alam | | |
| Test Case ID: T\_4 | | | Test Designed date: 7-8-22 | | |
| Test Priority (Low, Medium, High): Medium | | | Test Executed by: Nusrat jahan | | |
| Module Name: Add product by seller | | | Test Execution date: 13-8-22 | | |
| Test Title: Verify search and adding product | | |  | | |
| Description: Search for a product and see if adding the product works. | | |  | | |
| Precondition (If any): The user must be logged in to the website | | | | | |
| Test Steps | Test Data | Expected Results | | Actual Results | Status (Pass/Fail) |
| 1. Go to the website 2. Search a Product by name, price, and quantity. 3. Click a Product by seller 4. Add product | Name:M1 MacBook Air 13”  Price: 90000 Tk  Quantity:1 | User should find a product by name, price and quantity and it’s successfully added . | | As expected, | Pass |
| Post Condition: User has successfully added the product by searching it. A message will be shown stating that the product has been added and the user will be redirected to the product page. | | | | | |

**4. Add product by seller**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Project Name: Online Shopping System | | | Test Designed by: Nusrat Jahan | | |
| Test Case ID: T\_5 | | | Test Designed date:8-8-22 | | |
| Test Priority (Low, Medium, High): High | | | Test Executed by: Md. Mehedi Hasan | | |
| Module Name: Profile update | | | Test Execution date: 11-8-22 | | |
| Test Title: Profile change by name, E-mail, password, Phone number | | |  | | |
| Description: Profile can be updated by changing name, E-mail, password, Phone number. | | |  | | |
| Precondition (If any): The user must be logged in to the website | | | | | |
| Test Steps | Test Data | Expected Results | | Actual Results | Status (Pass/Fail) |
| 1. Go to the website 2. Press the “Profile Update” button. 3. Edit the user’s Name, Email address, Password, and Phone number 4. Click Enter. | Username: Mehedi  E-mail: mehedi456@gmail.com  Password: kj876465689  Phone Number:01945678923 | After entering all information, the profile should be updated to the latest Information. | | As expected, | Pass |
| Post Condition: User is validated with database and successfully changed his profile. | | | | | |

**5. Profile update**

**6.Product Ordering**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Project Name: Online Shopping System | | | Test Designed by: Md. Jahidul Islam | | |
| Test Case ID: T\_6 | | | Test Designed date: 10-8-22 | | |
| Test Priority (Low, Medium, High): Medium | | | Test Executed by: Joya Alam | | |
| Module Name: Product Ordering | | | Test Execution date: 14-8-22 | | |
| Test Title: Adding to cart and providing information and payment method. | | |  | | |
| Description: After selecting the product adding it to cart and giving personal info and payment method for ordering. | | |  | | |
| Precondition (If any): The user must be logged in to the website | | | | | |
| Test Steps | Test Data | Expected Results | | Actual Results | Status (Pass/Fail) |
| 1. Go to the website 2. Click add to cart 3. Enter user’s Name, Email address, Phone number, Address, Payment method 4. Click Confirm Order. | Username: Mehedi  E-mail: mehedi456@gmail.com  Phone Number:01945678923  Address:38/2, North Badda, Dhaka-1216  Payment: Cash on delivery. | After Adding all the information the product Order was successful. | | As expected, | Pass |
| Post Condition: Product is ordered successfully and have to wait for delivery. | | | | | |

# ITEM PASS/FAIL CRITERIA

|  |  |  |  |
| --- | --- | --- | --- |
| SI Number | Test Item | Pass Criteria | Fail Criteria |
| 1 | Account Registration | The user must provide his/her name, a valid email address, contact number, and password. | Providing any invalid  credentials |
| 2 | Account Login | The user must input a valid email address and password. | Providing any invalid  credentials |
| 3 | Add Product by seller | The user must fill up the form correctly, can only add products that are not already added and must be logged in.. | User not logged in or  Any credential left empty |
| 4 | Profile update | The user must provide valid information. The user must be logged in to the website. | Providing any invalid  credentials |
| 5 | Product ordering | The user must be logged in and there should be at least one and at most fifty  products in the cart. | The product quantity  too low or too high |

# TEST DELIVERABLES

* Acceptance test plan
* System/Integration test plan
* Unit test plans/turnover documentation
* Screen prototypes
* Report mock-ups
* Defect/Incident reports and summaries
* Test logs and turnover reports
* Fixed bug report

# STAFFING AND TRAINING NEEDS

The way to approach staffing and training will vary from project to project. If this section is part of a Master Test Plan, should indicate at what points in the project lifecycle different skills and numbers of staff are needed. If this is an Iteration Test Plan, should focus mainly on where and what training might occur during the Iteration.

Give thought to the training needs, and plan to schedule this based on a Just-In-Time (JIT) approach—there is often a temptation to attend training too far in advance of its usage when the test team has apparent slack. Doing this introduces the risk of the training being forgotten by the time it's needed.

Look for opportunities to combine the purchase of productivity tools with training on those tools, and arrange with the vendor to delay delivery of the training until just before you need it. If we have enough headcount, consider having training delivered in a customized manner, possibly an own site.

The test team often requires the support and skills of other team members not directly part of the test team. Make sure of arranging in the plan for appropriate availability of System Administrators, Database Administrators, and Developers who are required to enable the test effort.

# RESPONSIBILITIES

|  |  |  |
| --- | --- | --- |
| **Role** | **Minimum Resources Recommended (number of full-time roles allocated)** | **Specific Responsibilities or Comments** |
| Test Manager |  | Provide Management oversight Responsibilities includes.   * Planning and logistics * Agree mission * Identify motivators * Acquire appropriate resources * Present management reporting * Advocate the interests of test * Evaluate effectiveness of test effort |
| Test Analyst |  | Identifies and defines the specific tests to be conducted.  Responsibilities include:   * Identify test ideas * Define test details * Determine test results * Document change requests * Evaluate product quality |
| Test Designer |  | Define the technical approach implementation of the test approach.  Responsibilities include:   * Define test approach * Define test automation architecture * Verify test techniques * Define testability elements * Structure test implementation |
| Tester |  | Implements and executes are tests.  Responsibilities include:   * Implement tests and test suites * Execute test suites * Log results * Analyze and recover from test failures * document incidents |
| Test System Administrator |  | Ensure test environment and assets are managed and maintained.  Responsibilities include:   * Administer test management system * Install and support access to, and recovery of, test environment configurations and test labs |
| Database Administrator |  | Ensures test data (database) environment and assets are managed and maintained. |
| Database Manager |  | Responsibilities include:   * support the administration of test data and test beds (database) |
| Implementer |  | Implements and unit tests the test classes and test packages.  Responsibilities include:   * creates the test components required to support testability requirements as defined by the designer |

# 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

1. Prior to the website launch, it’s easy to focus all of our resources on development alone. While it’s essential to build a high performing website using, marketing efforts are just as important in order to ensure success Online shopping system website.
2. Marketing efforts should never be an afterthought. We should start when we decide to begin building our app. This is the most important element which cannot be ignored.
3. Online Shopping system new put demands risk management departments and created new loss exposures for our organizations' business. If our company plans to provide services or sell products via the Internet, system downtime can result in significant losses in revenue.

# APROVALS

|  |  |
| --- | --- |
| Project Sponsor | Nusrat Jahan |
| Development and testing team | Joya Alam |
| Project Manager | Md. Jahidul Islam |
| Test Manager | Md. Mehedi Hasan |
| Development Team Manager | Abir Hasan |

