NATURE SAVER

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APPROVAL

This **Project** titled **"Nature Saver"**, submitted by **Shah Newaz Al-Amin, 151-35-870** to the Department of Software Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc in Software Engineering and approved as to its style and contents.

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15|05|2019

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DECLARATION

I hereby declare that I have taken this project under the supervision of **Md. Khaled Sohel, and Department of Software Engineering, Daffodil International University**. I also declare that neither this project nor any part of this report has been submitted elsewhere for award of any degree.

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ACKNOWLEDGEMENT

First of all we would like to express my cordial gratefulness to Almighty **ALLAH** for **HIS** Kindness, for which I successfully completed my project with in time.

While working on this project I have received many invaluable help from a large number of people. I would like to take this opportunity to express my deepest gratitude to everyone who helped me.

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I would like to express my heartiest gratitude to **Dr. Touhid Bhuiyan, Professor and Head, Department Of Software Engineering, Daffodil International University** for his kind help to finish my project and also to other faculty members, the staff of the SWE Department, Daffodil International University .

And at last but not the least I must acknowledge with due respect the constant support and patience of my family members for completing this project.

ABSTRACT

Nature Saver is a system that can help stakeholder like, Nurseries to bring and sale their products online. To people to buy trees and equipment and get different kind of services related with gardening as well from online. Gardeners to get jobs remotely from different places. Everyone have to register in the system to see the products and services. For both Nurseries and Buyer have to login in the system to add and buy products as well as offer and to have a service. The payment will be given by cash to buy or to get a service. Admin will be responsible to add Nurseries and will be notified for every hand giving between Nurseries and Buyers. Buyers will be able to choose products from the nearby places, add or to delete a product, ask for different kind of services related with gardening. Nurseries will be able to add their available products in the mean of both trees and equipment to the system and also to choose the availability of a product and services.

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Chapter 01

Introduction

1.1 Motivation

Nature Saver is a simple project that has intention to make easier tree plantation from ordering to planting and taking care of gardens. Our aim is to simplify the regular life of the busy people who complains, they wish to have a garden in their balcony or on the roof top but cannot do it for the time in has to be given for this. If we can do this much for them then there is a possibility of reducing carbon percentage in the air as there will be more trees planted. Nature Saver is determined to help people planting trees in every possible places.

1.2 About the Project

This project is aimed to developing an online gardening servicing system. Admin is to add the available Nurseries in the system and an over look to every hand giving between Nurseries and Buyers. Nurseries of different places will add their products and offered services in the system. And will also be responsible to communicate with the buyer and finalizing the deal. Whereas the buyers will find the nearby place to order, add the available product and services, will finalize the deal with the Nursery. Both will also be allowed to cancel the deal mutually or there will be some extra charge added for the responsible side in their next deal.

1.3 Features

Buyer Module:

- Registration

- Log In

- Add or Delete Tree(s) or service(s)

- View Order Status

- Give Review

Admin Module:

- Log In

- Add/View/Update Nurseries

- View/Update Order Status

- View/Update Queries

- Get notification

Nursery Module:

- Registration

- Get Notification

- Login

- Manage Orders

- Add/View/Update Products

1.4 Objective of Nature Saver

To create a web app to help its user, all user like admin, nurseries, buyers should automate the system.

- To save time for people who are busy but have wish for gardening.

- Make easier communication between Nurseries and Buyers.

- To increase plants on our planet.

- To reduce the effect of global warming.

- It may impact the environment.
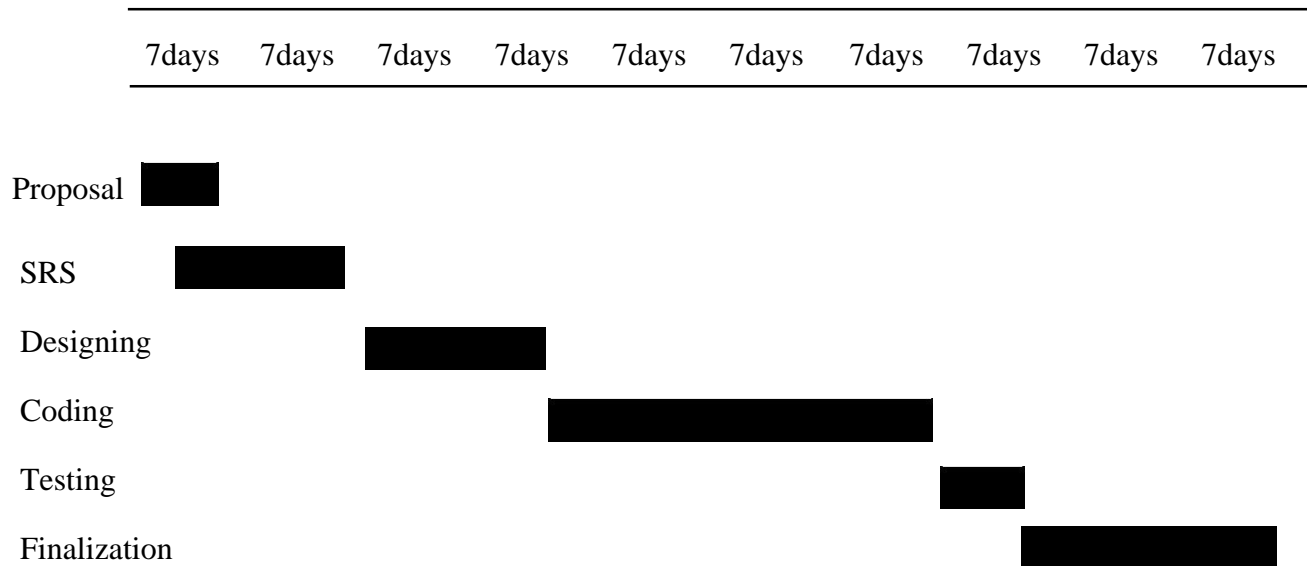
1.5 Problem in Existing System

Risk of mismanagement. No proper coordination between different Applications and Users.

Advantages:

- User friendliness is provided in the application with various controls.

- The system makes the overall procedure much easier and flexible.

- There is no risk of data mismanagement at any level while the project development is under process.

1.6 Schedule

	7days	7days	7days	7days	7days	7days	7days	7days	7days	7days

Proposal ▮

SRS ▮▮▮

Designing ▮▮▮

Coding ▮▮▮▮▮▮▮

Testing ▮▮

Finalization ▮▮▮▮▮

1.7 Software Deliverable

The main deliverables of this project is the complete system and the system document that will include:

- Software requirements and specification

- Software design document

1.8 Scope

- It can be used by any who wants to save time, for Buyers it will be easier for their wish of gardening to be fulfilled.

- Not only physically, Nurseries can showcase their product and services on online as well.

- On the other hand if user don't want hassle he/she can use it to ask for everything from tree plantation to taking care of them on online.

Chapter 2

Feasibility Study

2.1 Introduction

There are aspects in the feasibility study portion of the preliminary investigation:

- Technical Feasibility

- Operation Feasibility

- Economic Feasibility

2.2 Technical Feasibility

Nature Saver will conjuncts the user and it will provide the easiest way of service to a user who is looking for rapid service. Here, nurseries and buyers will communicate between them and will also be knowledgeable about the status of order and complain. A collection of all data about the Nature Saver will be archived in a website and reach it to stakeholder's door. By this both party will be benefited with either their product or with desired service. Nature Saver want to do the whole process in automated way for increasing data accuracy. We will try to provide a more secure, fast operational, risk managing, user friendly system which will give you the best service.

2.3 Operational Feasibility

Nature Saver will be operate by a large number of people. There will be so many stakeholder. Manual system is very slow system, we don't know when it will be an order of Hand giving between the parties or not. An automated system will notify the admin about it.

2.4 Economic Feasibility

Gardener who are now kind of in ignorance will get remote jobs to do. It will impact the economic status of both them and us. We will design our site based on all operational parameters such as reliability, maintainability, supportability, usability, sustainability, affordability. At this time. Our collaboration we can provide the service to the maximum number of stakeholder.

Chapter 3

Software Requirement Analysis

3.1 Introduction

For all project we need good requirement specification. If we don't have then our project can be destroy. For a good application we need this. There are some requirement that use for this application. We need Functional and non-functional requirements. Because all this requirement based with our system.

3.2 Functional Requirements

1. Buyer, login.

2. Add or Delete Tree(s) or service(s)

3. Give Review

4. Buyer to order status.

5. Login of admin account (account creation for admin)

6. Admin can view all resources.

7. Admin can add, delete or edit any resources.

8. Admin get notification/mail.

9. Nursery get notification/mail.

10. Nursery login.

11. Nursery Update product availability.

12. Add or Delete Tree(s) or service(s)

13. Contact

3.3 Nonfunctional Requirements

Security:

Personal details and admin, login id & password, Must be remain confidential.

Availability:

The website is available for 24 hours a day. It is always available for stakeholder.

Usability:

It has good graphical user interface. It is user friendly. So user feel easy to use.

Efficiency:

It is efficient for all user. This give better performance for user.

3.4 Methodology:

I used waterfall model. Because, I collected requirement at a time, second time this requirement was not changed.

3.5 Software Requirement Analysis
3.5.1 Objective/Goals

- Add new Places (Nursery).

- Add new Products.

- Add new resource.

- Update new resources.

- Automatically handle this process.

3.6 Software Requirement Specification

Software Requirement Specification is a description of full software system requirements.

Software Requirement Specification describes the behavior of software from user's point of view.

The specified requirements are shown in following table based on module. The functional requirements and non-functional requirements are following:

Functional and non-Functional Requirements.

SRS id	Function	Description	SRS Type	Priority
SRS-01	Buyer	All Buyers must register/Login into this system to use.	FR	HIGH
SRS-02		Order product or services and give review.	FR	HIGH
SRS-03		Add or Delete options should be given.	FR	HIGH
SRS-04	Nursery	All Nurseries must register/Login into this system to use.	FR	HIGH
SRS-05		Nurseries can update products or services and is availability.	FR	HIGH
SRS-06		Nurseries can see order status.	FR	HIGH
SRS-07	Admin management	Login admin account(account creation for admin)	FR	HIGH
SRS-08		Admin can add, delete, view or edit any resources.	FR	HIGH
SRS-09	Notification Management	Admin get notification/mail.	FR	HIGH
SRS-10		Nursery get notification/mail.	FR	HIGH

SRS-11	Security	No one can get access of the admin panel without valid username and password.	NFR	HIGH
SRS-12	Availability	The website is available for 24 hours a day. It is always available for stakeholder.	NFR	Moderate
SRS-13	Usability	It has good graphical user interface. It is user friendly. So user feel easy to use.	NFR	Moderate
SRS-14	Efficiency	It is efficient for all user. This give better performance for user.	NFR	HIGH

Chapter 4

System Design and Development

4.1 Introduction

Design is the first step in the development phase for any techniques.

Software system design is important thing for an application. If design is not proper then application could be problematic. System should have good design. Software design is a process to transform user requirements into some suitable form, which helps the programmer in software coding and implementation.

4.2 Use Case diagram

Figure 4.2 Use Case Diagram

4.3 Data Flow Diagram (DFD)

4.3.1 Context Diagram (Level-0 DFD)
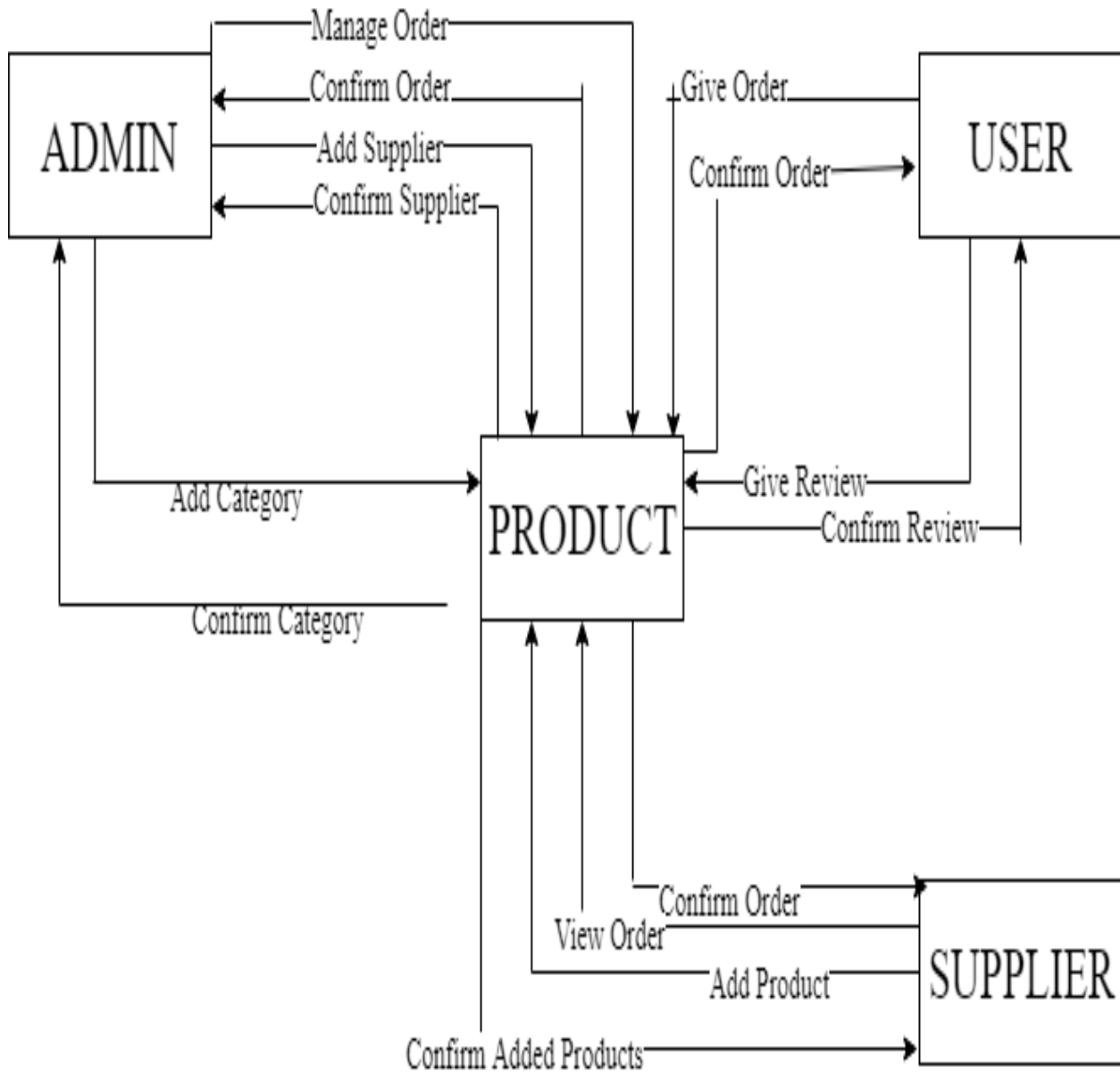
Figure 4.3.1 Context Diagram (DFD 0)
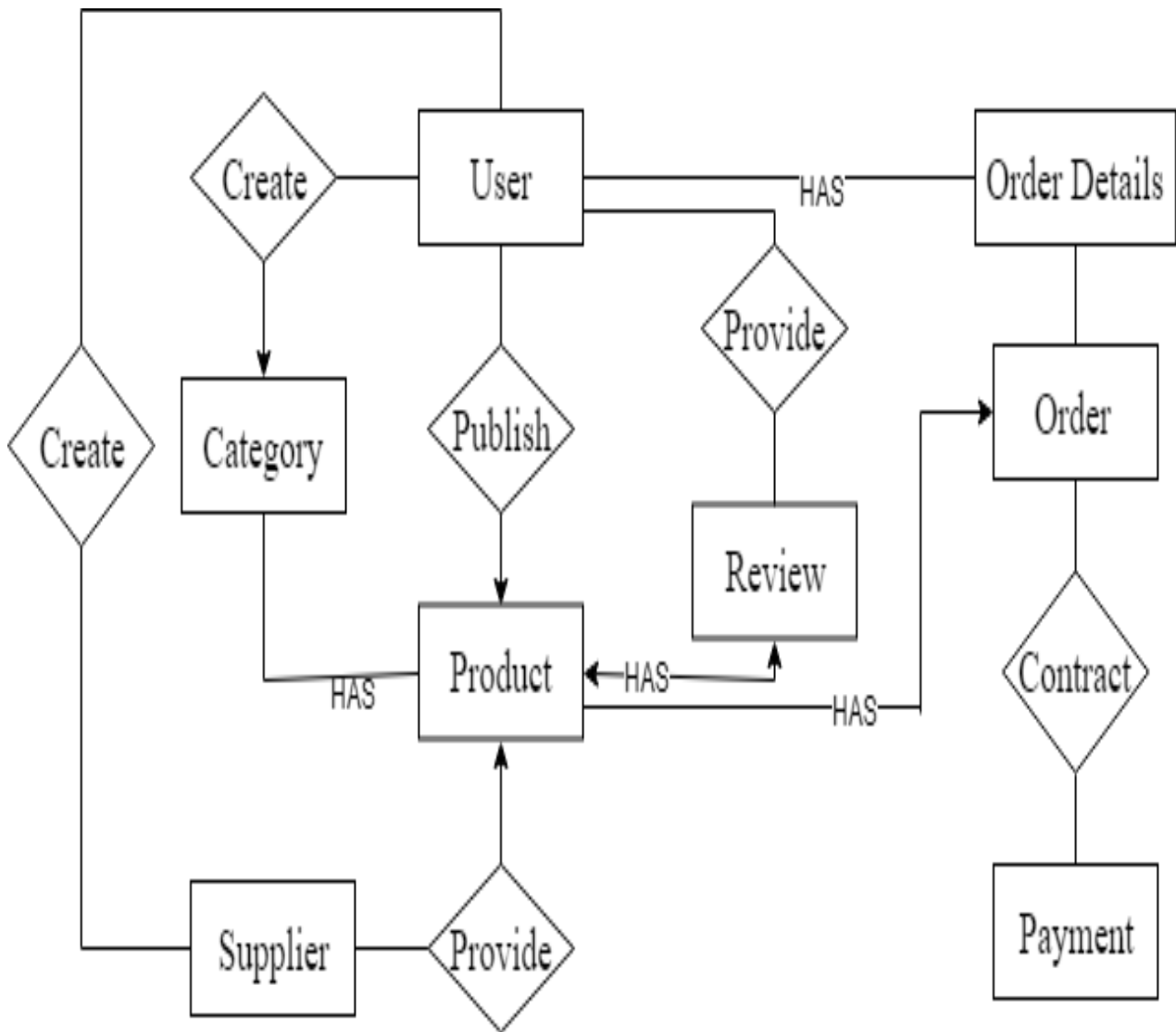
4.4 Entity Relationship Diagram (ERD)

Fig: ER-Diagram
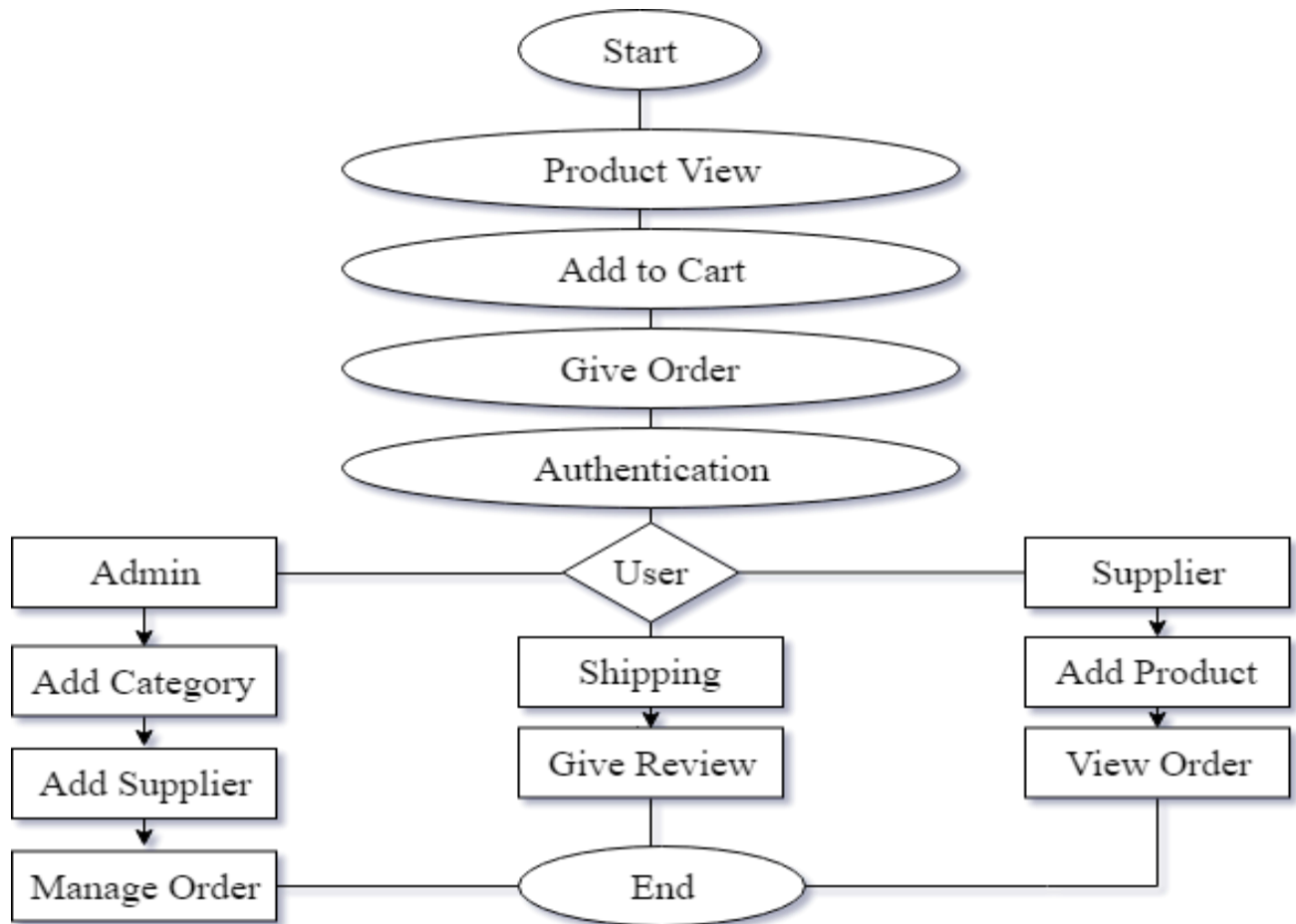
4.5 Activity Diagram

Figure: 4.5 Activity Diagram

Chapter 5

System Interfaces

5.1 Software Language or Framework

- HTML5

- CSS3

- Java Script

- JQuery

- Bootstrap

- Php Laravel Framework

-

5.2 Development Tools and Technology

5.2.1. User Interface Technology
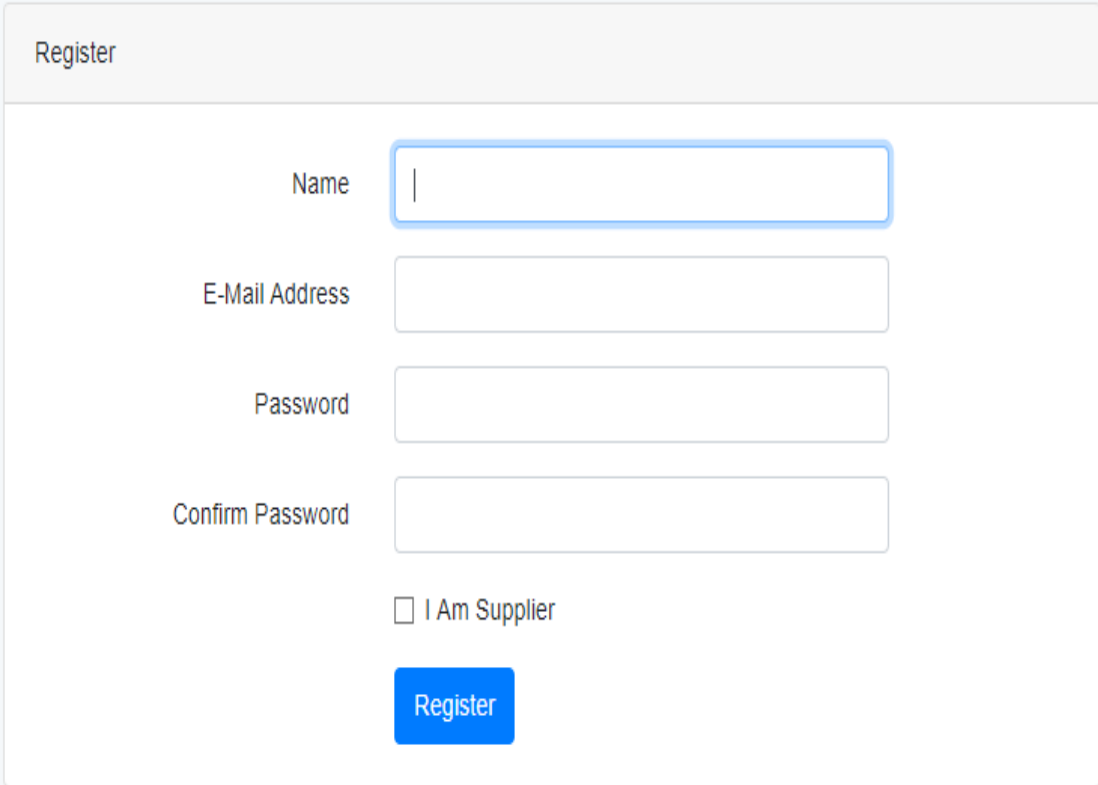
- CSS Framework and Bootstrap 4

- Font Awesome

5.2.2. Implementation Tools & Platforms

- Sublime Text 3

- My SQL Server

Chapter 6

Output Screens

6.1 User Registration

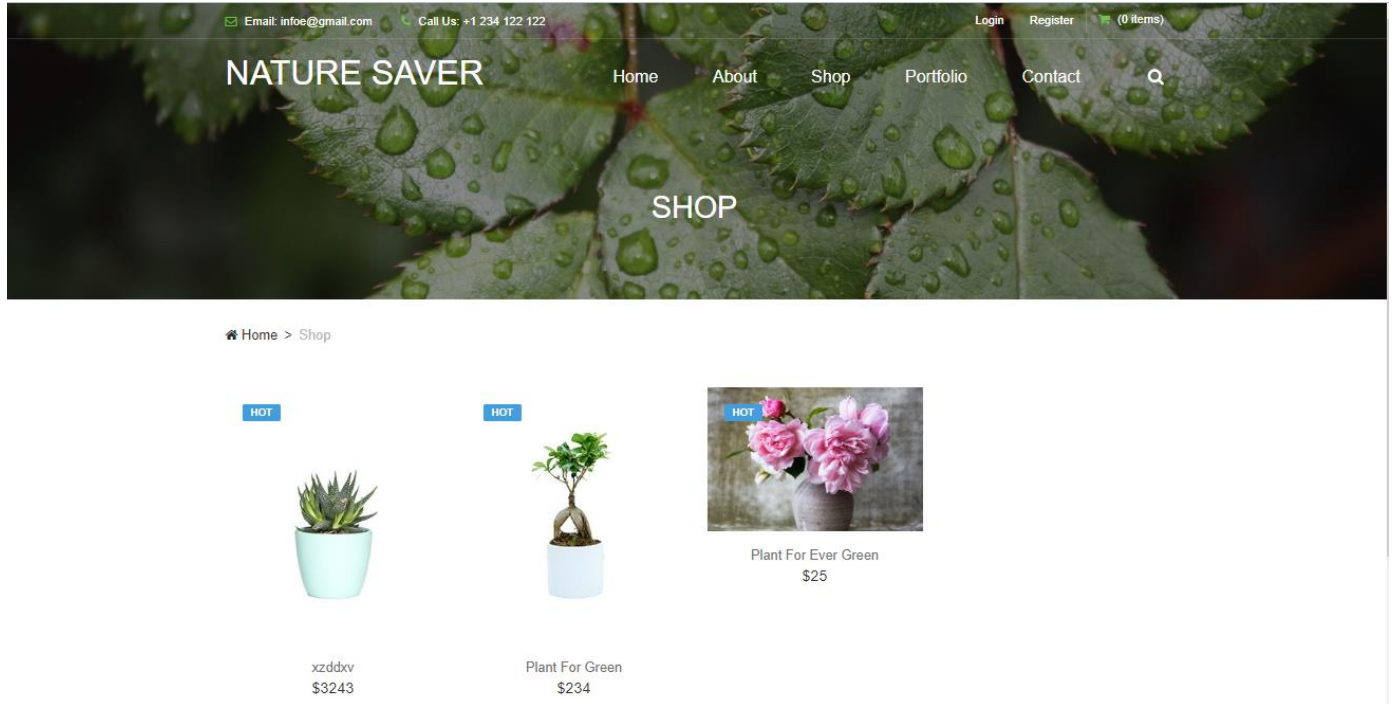**Figure: 6.1 User Registration**

6.2 Products

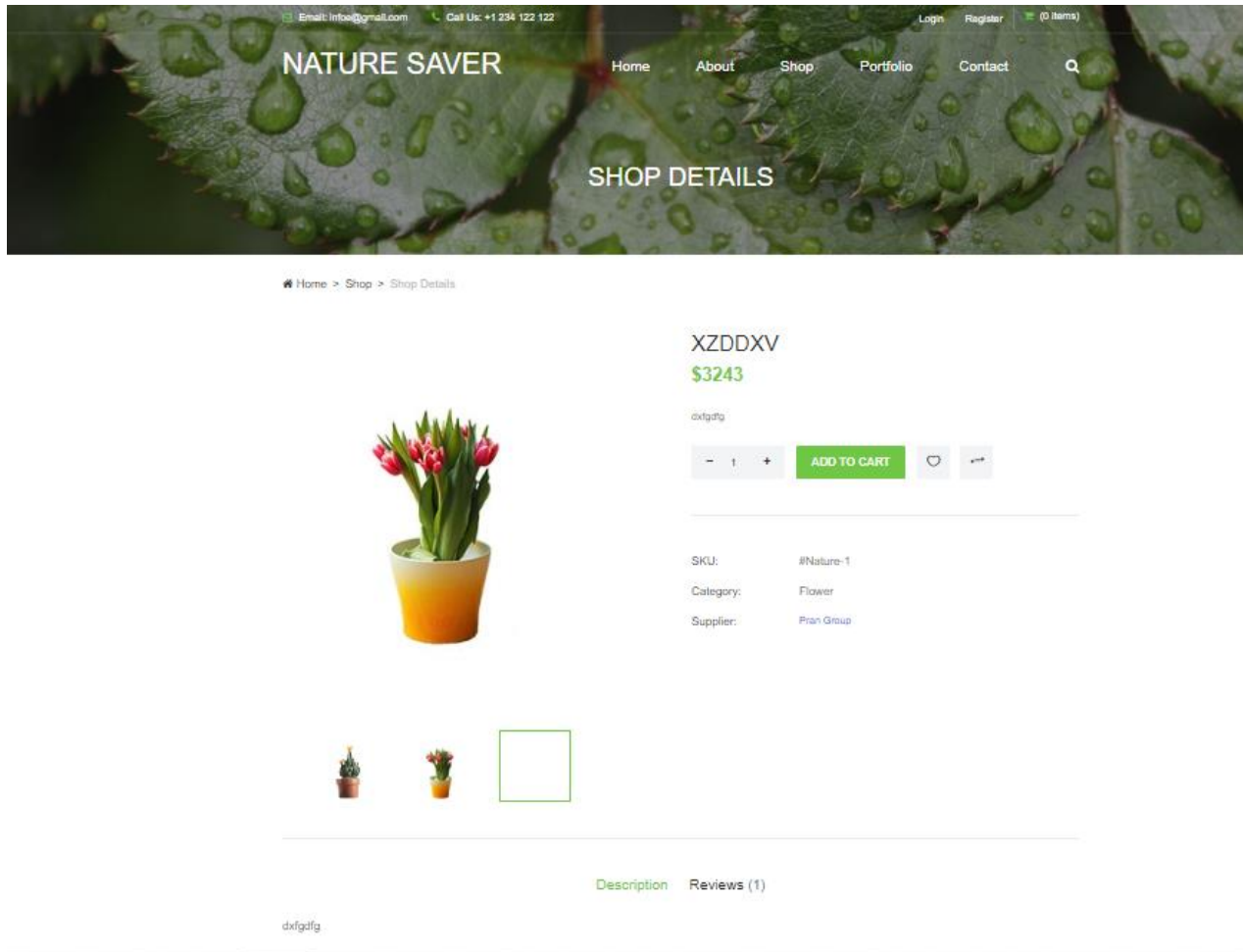

Figure: 6.2 Products

6.3 Products Details

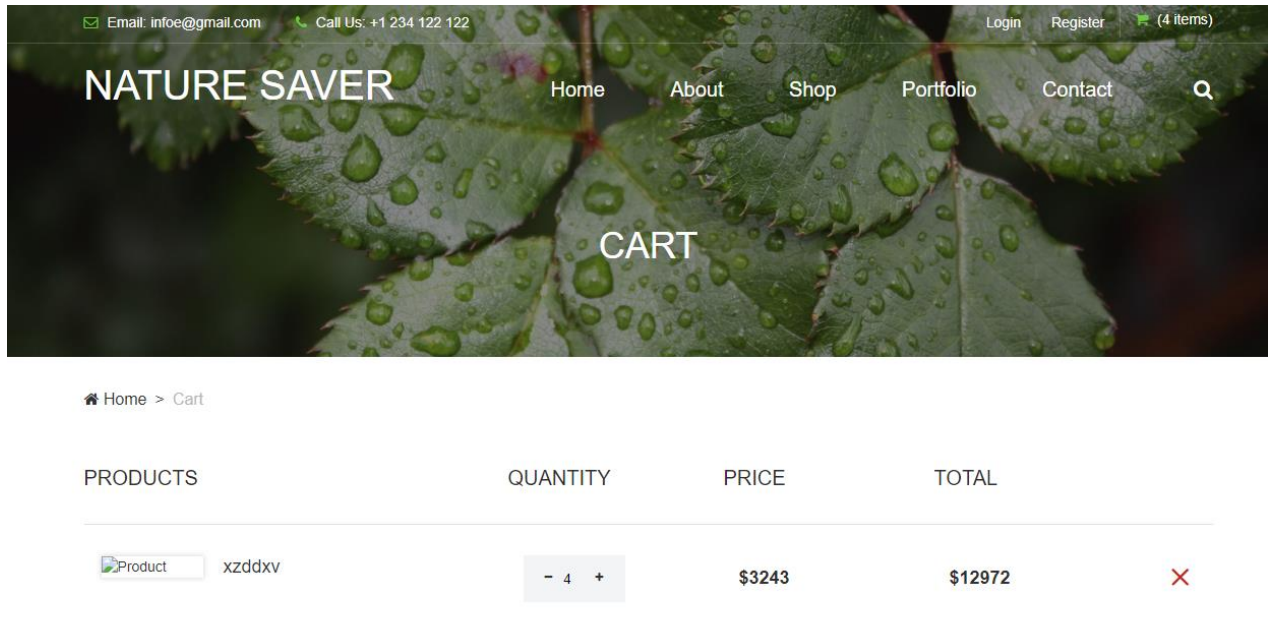**Figure: 6.3 Product Details**

6.4 Cart

Figure: 6.4 Cart

6.5 Portfolio

Figure: 6.5 Portfolio
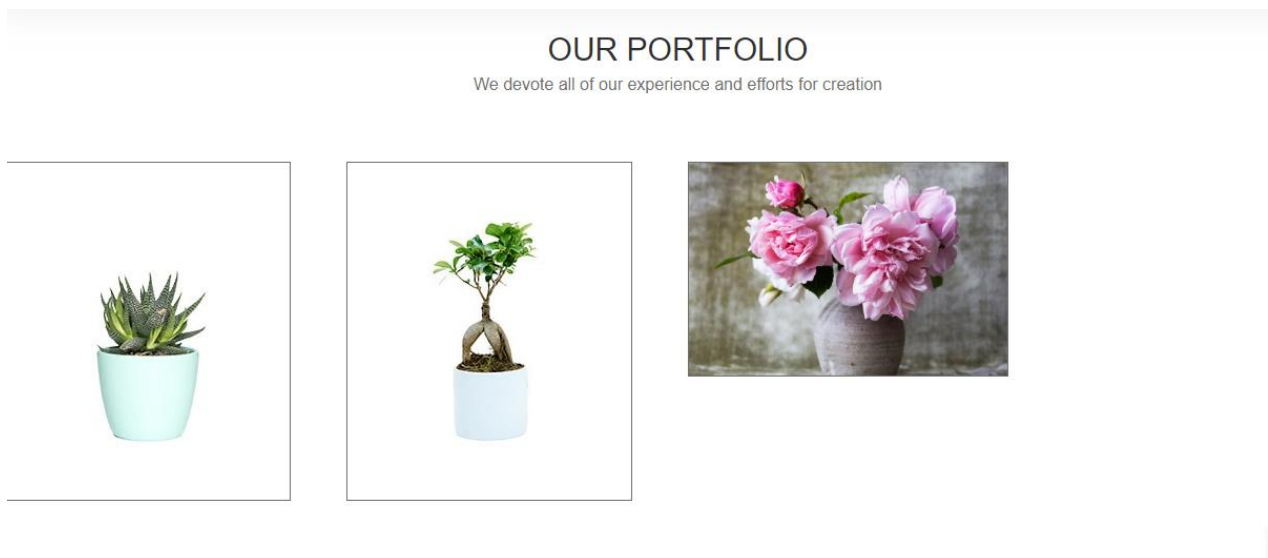
6.6 New Arrivals
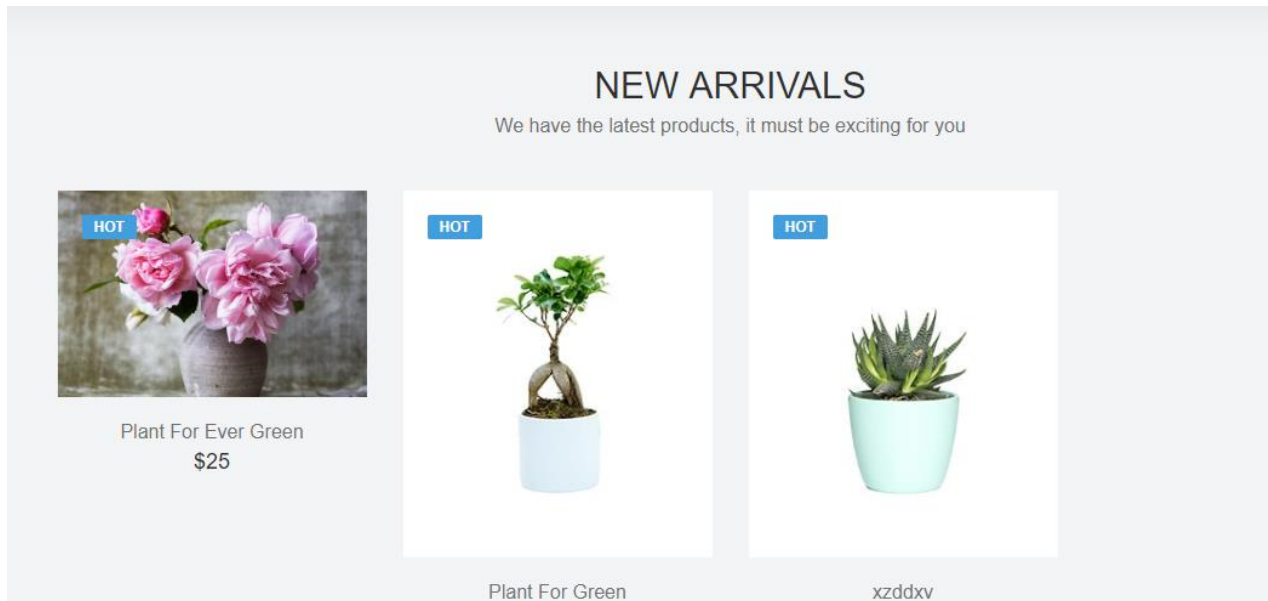
Figure: 6.6 New Arrivals

6.7 Testimonial
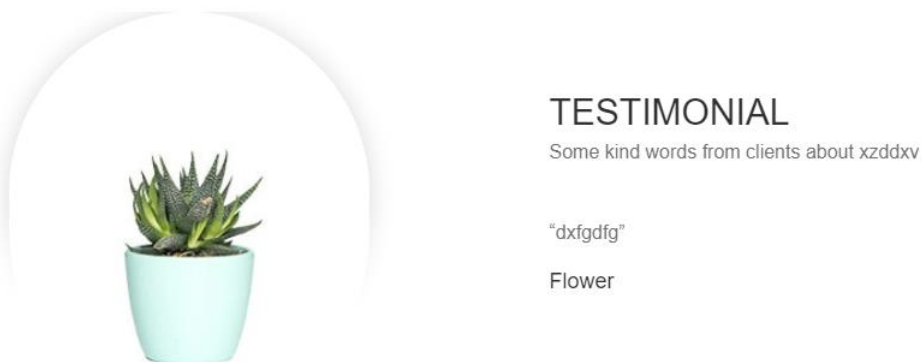
Figure: 6.7 Testimonial

Chapter 7

Testing

7.1 Importance of Testing

- Testing is used to find errors on application program.

- It is used for both validation and verification when developing a product.

- It is used to find effective error's identification.

- It makes sure customer satisfaction.

- Make sure quality of application and reliability.

7.2 Testing Parts

- Nurseries Information (Product add, Order management)

- Admin Information (Category and Product add, Order management)

- Buyer Information (Registration, Review Product, view Product, Place Order)

7.3 Testing Environment (Hardware/Software Requirements)

- Requirement

- Test data

- Web Application

- Database server

- Operating System(OS)

- Browser

7.4 Test Plan Strategy

Test plan strategy is very important part of software development. Now we do following testing:

- Unit testing

- Integration testing

- System testing

- Acceptance testing

7.4.1 Unit Testing

Unit testing is a level of software testing where individual units/ components of a software are tested. A unit is the smallest testable part of any software. It usually has one or a few inputs and usually a single output.

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Unit Testing Case Module:

Test Case ID: TC-01	**Module Name:** Nurseries Information
Module: Product Entry	**Test Designed:** Shah Newaz
Test Priority: (Low/Medium/High): High	**Test Date:** 30.04.2019
Test Title: Product add, Order management	**Test Executed By:** Shah Newaz
Description: Test the system with Product add, Order management	**Test Executed Date:** 30.04.2019

7.4.2 Integration Testing

In Integration Testing, individual software modules are integrated logically and tested as a group.

Integration Testing Case Module:

Test Case ID: TC-02	**Module Name:** Nurseries Information, Buyer Information
Module: Product add, Order management	**Test Designed:** Shah Newaz
Test Priority: (Low/Medium/High): High	**Test Date:** 30.04.2019
Test Title: Product add, Order management, Registration, Review Product, view Product, Place Order.	**Test Executed By:** Shah Newaz
Description: Test the system Product add, Order management, Registration, Review Product, view Product, Place Order.	**Test Executed Date:** 30.04.2019

7.4.3 System Testing

System Testing is a black box testing technique performed to evaluate the complete system the system's compliance against specified requirements. In System testing, the functionalities of the system are tested from an end-to-end perspective.

System Testing Case Module:

Test Case ID: TC-03	**Module Name:** Whole System(Authentication, Product add, Order management, Category and Product add, Review Product, view Product, Place Order.)
Module: Whole System(Nurseries Information, Admin Information, Buyer Information)	**Test Designed:** Shah Newaz
Test Priority: (Low/Medium/High): High	**Test Date:**30.04.2019
Test Title: Whole System(Authentication, Product add, Order management, Category and Product add, Review Product, view Product, Place Order). **Description:** Test the system with Registration, Complain add, view Complain, Resource add, Status modify, Resource add, Resource modify	**Test Executed By:** Shah Newaz **Test Executed Date:** 30.04.2019

7.4.4 Acceptance Testing

Acceptance Testing is a level of the software testing where a system is tested for acceptability.

The user tests the system before it is rolled out to be fully used.

Acceptance Testing Case Module:

Test Case ID: TC-04	**Module Name:** Admin Information
Module: Nurseries Information	**Test Designed:** Shah Newaz
Test Priority: (Low/Medium/High): Medium	**Test Date:**30.04.2019
Test Title: Category and Product add, Order management	**Test Executed By:** Shah Newaz
Description: Test the system the thing	**Test Executed Date:** 30.04.2019

7.5 Test Case

A test case is a document, which has a set of test data, preconditions, expected results and post conditions, developed for a particular test scenario in order to verify compliance against a specific requirement.

7.5.1 User Registration Module Test

Case Test Case Unit Test

Module 1: Login

UTC ID	UTC-01
UTC Name	Test Input Values of Admin Login page
Code Module	Login
UTC Description	1. The password textbox must hide input value as ****** 2. Enter Invalid username, and then the system displays an error Message. 3. Enter Invalid password, then the system displays an error Message 4. Enter valid username and valid password, it should lead the user to the respected page
Input Values	Input 1: someone [Invalid username] Input 2: 1234 (****)[Invalid password] Input 3: admin [valid username] Input 4: admin (****) [valid password]
Expected Output	Input 1: false, Input 2: false, Input 3: true, Input 4: true and redirect to respected page
Actual Output	Input 1: ✕, Input 2: ✕, Input 3: ✓, Input 4: ✓ and lead to respected page
Pass/Fail	Pass: Complete 4 of 4. Total percent: 100%

Chapter 8
Conclusion

8.1 Limitations

The system are not stable this time. It runs in developing process. The security system is not well organized in this phase. It also has some bugs yet to fix.

8.2 Future Scope

As the gardeners in Bangladesh is neglected as person in their job field, this project will be driven toward their access to get remote job for different places through the system.

8.3 Reference

Acceptance Testing,

Available: softwaretestingfundamentals.com/acceptance-testing

Integration testing

Available:www.guru99.com/integration-testing.html

System Testing

Available: www.tutorialspoint.com › Software Testing Dictionary › System Testing

Unit testing

Available: softwaretestingfundamentals.com/unit-testing/