

Flora Aid

Submitted By:

Mehnaz Islam Mohona Student ID: 153-35-1363 Department of Software Engineering Daffodil International University

Supervised By:

Tapushe Rabaya Toma Lecturer Department of Software Engineering Daffodil International University

This Project report has been submitted in fulfillment of the requirements for the Degree of Bachelor of Science in Software Engineering.

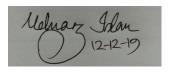
Department of Software Engineering DAFFODIL INTERNATIONAL UNIVERSITY

Fall-2019

DECLARATION

I hereby declare that, this project report submitted to the Daffodil International University, is arecord of an original work done by me under the guidance of Tapushe Rabaya Toma, Senior Lecturer at the department of Software Engineering, Daffodil International University. I also declare that the project reported in this document has not been submitted to any other University or Institute for the award of any degree or diploma.

Submitted By:



Mehnaz Islam Mohona

ID: 153-35-1363

Department of Software Engineering

Faculty of Science and Information Technology

Daffodil International University

Certified By:



Tapushe Rabaya Toma

Senior Lecturer

Department of Software Engineering

Faculty of Science and Information Technology

Daffodil International University

ACKNOWLEDGEMENT

Alhamdulillah, I have been successfully complete the project by the Gratefulness of almighty Allah. I would acknowledge many honorable individuals whose have been contributed for the preparations of the project in different stages.

First, I would like to thanks from my heart to my parents to give the opportunity for Studying in Software Engineering. They made my way easier to achieve my goals and my dreams, without them, it will not be possible.

I would express my deepest thanks to my honorable supervisor and teacher Md. ,Lecturer, Department of Software Engineering, Daffodil International University. He is the smartest person I had ever seen and she had lot of experience in the software engineering field. His valuable advice, supervision and lot of experience made it easier to complete the project. Gratefulness from my heart to Honorable Dr. Touhid Bhuiyan, Head, the Department of Software Engineering, for his kind aid to finish my project. Also, thanks from my heart to my honorable faculty member and staff of Software Engineering department of Daffodil International University. My contribution to this project did not make it successful without help of my course mate. They always encouraged me to develop this project and help me to discover the project goals and problem also help me find out the critical problem solutions.

Finally, I would like to express my grasp to the readers, reviewers of this document who will send me criticisms for further improvement.

ABSTRACT

This project is "Flora Aid". Flora Aid is a web based project to help gardeners to ensure greater profitability through direct gardener to gardener and gardener to retailer communication. This service boost business communication and brings transparency in the system. This site allows registered gardener and retailer to sell their growing plants and products. Every software development follows some rules and method, I also following some method to develop this project. My whole project work will follow the agile methodology. Which is best software development process to develop a software. I choose it because my whole project needs to implement some part then test it and agile methodology will help me to reduce the project risk.

TABLE OF CONTENTS

DECLARATION	II
ACKNOWLEDGEMENT	. III
ABSTRACT	IV
TABLE OF CONTENTS	V
CHAPTER 01: INTRODUCTION	1
1.1. Project Overview	1
1.2. The Purpose of the Project	1
1.2.1. Background	1
1.2.2. Benefits & Beneficiaries	2
1.2.3. Goal of the Project.	2
1.3. Stakeholders	3
1.4. Proposed System Model (block diagram)	3
1.5. Project Schedule	3
1.5.1. Gantt chart	4
CHAPTER 02: SOFTWARE REQUIREMENT SPECIFICATION	5
2.1. Functional Requirements	5
2.1.2. User can Login into System:	6
2.1.3. User can manage their profile	6
2.1.4. Gardener can buy products or plants	6
2.1.5. Retailer can Sell Products or Plants	6
2.1.6. Admin can Manage Posts	7
2.1.7. Any one can Search	7
2.1.8 Users can Comment on Products	7
2.1.9. Users can Add product to cart	8
2.1.10. Users can Checkout.	8
2.1.10. Users can Logout	8

	2.2. Data Requirements	9
	2.3. Performance Requirements	9
	2.3.1. Speed and Latency Requirements	9
	2.3.2. Precision or Accuracy Requirements	9
	2.3.3. Capacity Requirements	9
	2.4. Dependability Requirements	9
	2.4.1. Reliability Requirements	. 10
	2.4.2. Availability Requirements	. 10
	2.5. Maintainability and Supportability Requirements	10
	2.5.1. Maintenance Requirements	10
	2.5.1. Supportability Requirements	. 10
	2.6. Security Requirements	10
	2.6.1. Access Requirements.	10
	2.7. Usability and Human-Interaction Requirements	. 10
	2.7.1. Ease of Use Requirements	. 10
	2.7.2. Understandability and Politeness Requirements	11
	2.7.3. Accessibility Requirements	. 11
	2.8. Look and Feel Requirements	. 11
	2.8.1. Style Requirements	11
	2.9. Legal Requirements	. 11
	2.9.1. Standards Requirements	11
CHA	APTER 03: SYSTEM ANALYSIS	12
3.1.	Use case Diagram:	12
	3.2. Use Case Description:	14
	3.2. Activity Diagram	. 21
	3.2.1 User Registration	. 21
	3.2.2 User Log In	. 22
	3.2.3 User Profile Manage	23

3.2.4 Store Product	24
3.2.5 Manage Product	25
3.2.6 Buy Product	26
3.2.7 Review product	27
3.2.8 Search	28
3.2.9 Contact	29
3.2.10 Post FAQ	30
3.2.11 View FAQ	31
CHAPTER 04: SYSTEM DESIGN SPECIFICATION	33
4.1. Sequence Diagram:	33
4.1.1. Registration:	33
4.1.2. Log In	33
4.1.3 Manage Profile	34
4.1.4. Store Product	35
4.4.5. Manage Product	35
4.1.6. Buy Product	36
4.1.7. Review Product	36
4.1.9. Search	36
4.1.10. Contact	37
4.1.11. Post FAQ	37
4.1.12. View FAQ	38
4.2. Class Diagram:	38
4.3. Entity Relationship Diagram	39
4.4. Schema Diagram	40
4.5. Development of Tools and Technology	41
4.5.1. User Interface Technology	41
1. HTML5	41
2. CSS3	41

3. Bootstrap 4	41
4. JavaScript	41
5. SASS	41
6. jQuery Plugins	41
7. Brackets Editor	41
4.5.2. Implementation Tools & Platforms	41
1. Object-Oriented PHP	41
2. MySQL	41
3. Xammp	42
4. Laravel Framework	42
5. Windows PowerShell/CMD	42
6. Atom IDE	42
CHAPETR 05: SYSTEM TESTING	43
5.1. Testing Features	43
5.1.1. Feature to be tested	43
5.1.2. Feature not to be tested	43
5.2. Testing Strategies	43
5.2.1. Test Approach	43
5.2.2. Pass/Fail Criteria	43
5.2.3. Suspension and Redemption	44
5.2.4. Testing Schedule	44
5.3. Test Cases	44
5.3.1. Test Case: 01	44
5.3.2. Test Case: 02	46
CHAPTER 06: USER MANUAL	49
6.1 Registration (Both user):	49
6.2 User Sign In (Both User):	49
6.3.Gardener Info:	50

6.4 Gardener Order list:	50
6.5 Gardener Added to Cart:	51
6.6 View Cart:	51
6.7. Checkout:	52
6.8. Order Confirmation:	53
6.9. Retailer Information:	53
6.10.Retailer Product Store:	54
6.11. Retailer Product Manage:	54
6.12. Admin Log in:	55
6.13. Admin Dashboard:	55
6.14. Admin Product Manage:	56
6.15. Admin FAQ Post:	56
6.16. Admin FAQ Manage:	57
6.17. User Information (Gardener):	57
6.18. User Information (Retailer):	58
6.19. Contact:	58
CHAPTER 07: PROJECT SUMMARY	60
7.1. GitHub Link	60
7.2. Limitations	60
7.3. Obstacles & Achievements	60
7.4. Future Scope	61
Conclusion	61
Appendix	62
References	63

CHAPTER 01: INTRODUCTION

1.1. Project Overview

Flora Aid is a web based project to help gardeners to ensure greater profitability through direct gardener to gardener and gardener to retailer communication.

This service boost business communication and brings transparency in the system. This site allows registered gardener and retailer to sell their growing plants and products.

User can get to know about necessary information for farming and planting and prices of products and plants.

The System must have a System Administrator (admin). Admin can maintain all kind of process. Admin can disable user account, accept or disable user post, maintain user query and reply that, and some basic option.

1.2. The Purpose of the Project

In this system, gardener can easily get their necessary plants and tools for gardening. It'll reduce their work and retailer can also sell their products to the gardener.

1.2.1. Background

In this modern era people are interested in urban gardening. Gardening is the practice of growing and cultivating plants as part of horticulture. In gardens, ornamental plants are often grown for their flowers, foliage, or overall appearance; useful plants, such as root ©Daffodil International University

vegetables, leaf vegetables, fruits, and herbs, are grown for consumption, for use as dyes, or for medicinal or cosmetic use. Gardening is considered by many people to be a relaxing activity.

There is a wide range of garden ornaments and accessories available in the market for both the professional gardener and the amateur to exercise their creativity. These are used to add decoration or functionality, and may be made from a wide range of materials such as copper, stone, wood, bamboo, stainless steel, clay, stained glass, concrete, or iron. Examples include trellis, garden furniture, statues, outdoor fireplaces, fountains, rain chains, urns, bird baths and feeders, wind chimes, and garden lighting such as candle lanterns and oil lamps.

Very often gardener loose their interest in gardening because of insufficient accessories and desired plants. This system will help gardener to get their needed plants and products and also will help retailer to sell those products and plants.

1.2.2. Benefits & Beneficiaries

This projects are beneficiaries for both gardener and retailer. Benefits are,

- 1. This system is web based so anyone can search and see information from the system.
- 2. It is very easy to use.
- 3. It'll increase interest in gardening and we replace greenery lost on the ground from development with greenery in the sky through high-rise terraces and gardens.
- 4. Retailer can sell their products easily.

1.2.3. Goal of the Project

This system will increase people interest in gardening. Which will help to provide home made fresh vegetable, fruits, flower and herbs. And also ensure fresh air and sound mind by providing oxygen and beautiful environment. And making money from this will be extra and attract people to do gardening.

1.3. Stakeholders

There are four types of stakeholders.

- 1. Gardener
- 2. Retailer
- 3. Visitor
- 4. Admin

1.4. Proposed System Model (block diagram)

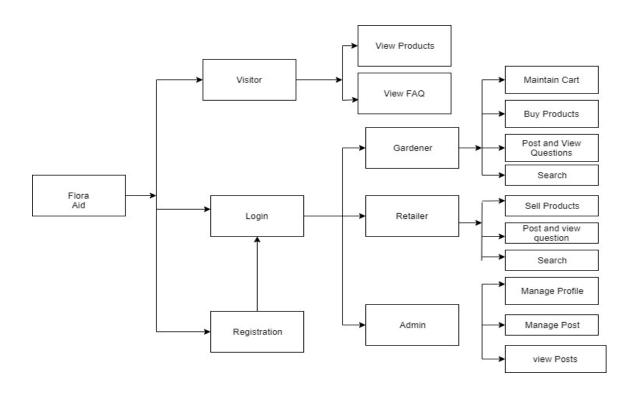


Figure 1: Block Diagram

1.5. Project Schedule

1.5.1. Gantt chart

Table 01: Gantt chart

Task/Da	Start D	End Da	Status	May	June	Aug	Sept	Dec
Proposal	05-05-20	13-05-20	Compete					
Requirem	25-05-20	20-06-20	Compete					
Design	25-06-20	20-08-20	Compete					
Implemen	05-09-20	14-10-20	Compete					
Testing	20-10-20	30-10-20	Compete					
Documen n	07-11-20	02-12-20	Compete					

1.5.2. Release Plan:

The following contents will be delivered with the project:

- Project CD
- Project Demo
- User Manual Along with Tutorial
- Documentation

CHAPTER 02: SOFTWARE REQUIREMENT

SPECIFICATION

2.1. Functional Requirements

Functional Requirements are the function which describe system behaviour and it must implement to the system. It enable users to accomplish their tasks. Here's I'm going to describe about my project's Functional Requirements.

2.1.1. User can Registration into System:

Requirements	User can Registration into System
Description	After enter url in any internet browser, in software index page user must need an account. For All user Registration is mandatory. Only authorized user can access to the system.
Stakeholders	Retailer, Gardener

2.1.2. User can Login into System:

Requirements	User can Login into System
Description	After enter url in any internet browser, in software index page user must have log in first before enter the main system. For All user Login is mandatory. Only authorized user can login to the system.
Stakeholders	Retailer, Gardener, Admin

2.1.3. User can manage their profile

Requirements	User can manage their profile
Description	After log in user can update their profile information. Only logged in users can manage their profile.
Stakeholders	Retailer, Gardener

2.1.4. Gardener can buy products or plants

Requirements	Gardener can buy products or plants
Description	After log in user can buy their desired products. Only logged in users can buy.
Stakeholders	Retailer, Gardener

2.1.5. Retailer can Sell Products or Plants

Requirements	Retailer can Sell Products or Plants
Description	After log in user Retailer post for sell. Only logged in Retailers can post for sell.
Stakeholders	Retailer

2.1.6. Admin can Manage Posts

Requirements	Admin can Manage Posts
Description	System Admin can manage posts which is posted by retailers.
Stakeholders	Admin

2.1.7. Any one can Search

Requirements	Any one can Search
Description	After enter url in any internet browser, everyone can search.
Stakeholders	Visitor, Retailer, Gardener, Admin

2.1.8 Users can Comment on Products

Requirements	Users can Comment on Products
Description	Login is mandatory. Only authorized user can

	comment on the products.
Stakeholders	Retailer, Gardener, Admin

2.1.9. Users can Add product to cart

Requirements	Users can Add Product to Cart
Description	Login is mandatory. Only logged in users can add their desired products to cart.
Stakeholders	Retailer, Gardener

2.1.10. Users can Checkout

Requirements	Users can Checkout
Description	After adding cart user can checkout their products.
Stakeholders	Retailer, Gardener

2.1.10. Users can Logout

Requirements	Users can Logout
Description	All logged in users can log out from their profile.

Stakeholders	Retailer, Gardener

2.2. Data Requirements

- 1. Types of entity of the system
- 2. Route Data locations
- 3. Capacity and resources of the data requirements
- 4. Data source sequence
- 5. Data Availability schedules
- 6. Quantity of data
- 7. Availability of data

2.3. Performance Requirements

2.3.1. Speed and Latency Requirements

- 1. Data should update in database within 1 second.
- 2. Query should bring result within 2 seconds.
- 3. UI design should load within 7 seconds.
- 4. Validation error should show within 1 second.

2.3.2. Precision or Accuracy Requirements

- 1. After login the index should show the accurate data for the specific user..
- 2. The registration form should provide accurate data to store in database.
- 3. The user should get accurate data which is assigned to them.
- 4. Gardener must get the exact product the ordered.

2.3.3. Capacity Requirements

- 1. Not more than 1000000 users to be registered.
- 2. Not more than 100 users should login at the same time.

2.4. Dependability Requirements

2.4.1. Reliability Requirements

- 1. The user registration should register a new user and update database with given input.
- 2. Log in should perform when the correct user name and password is given.
- 3. The delete form should delete a product/plant and update the database.
- 4. Admin should maintain posts and check if it's related to system.

2.4.2. Availability Requirements

- 1. The system should available 24 hours a day and 7 days a week.
- 2. The system should perform activities immediately upon user request.
- 3. The system should run in any web browser.

2.5. Maintainability and Supportability Requirements

2.5.1. Maintenance Requirements

- 1. Modify the system when the software environment changes.
- 2. Fix bug when the system is corrupted.
- 3. Fix accidental data mistakes by user.

2.5.1. Supportability Requirements

1. Provide documentation for user guidance.

2.6. Security Requirements

2.6.1. Access Requirements

- 1. Only registered user can login to the system.
- 2. Gardener have to provide delivery address to ensure it's delivery.

2.7. Usability and Human-Interaction Requirements

2.7.1. Ease of Use Requirements

1. The system UI should user friendly.

- 2. The new user should learn the system.
- 3. The system maintenance should not complex.

2.7.2. Understandability and Politeness Requirements

- 1. Any user should understand the system.
- 2. Non-technical person should operate also.

2.7.3. Accessibility Requirements

- 1. The system should accessible from any other devices.
- 2. User should access their account within a request.

2.8. Look and Feel Requirements

2.8.1. Style Requirements

The 'Flora-Aid' system is look a like others e-commerce plant and gardening ornaments, tools and products web-sites like http://sobujkanon.com/. Where gardener, retailer and visitor can communicate and continue their business.

2.9. Legal Requirements

2.9.1. Standards Requirements

- 1. Retailer and Gardener and Admin are the registered user of the system. So they have to log in to the system with valid credentials.
- **2.** Visitor should view the plants/products for selling.

CHAPTER 03: SYSTEM ANALYSIS

3.1. Use case Diagram:

We have use case diagram and it will capture core functionalities of our system and visualize the interactions of actors .

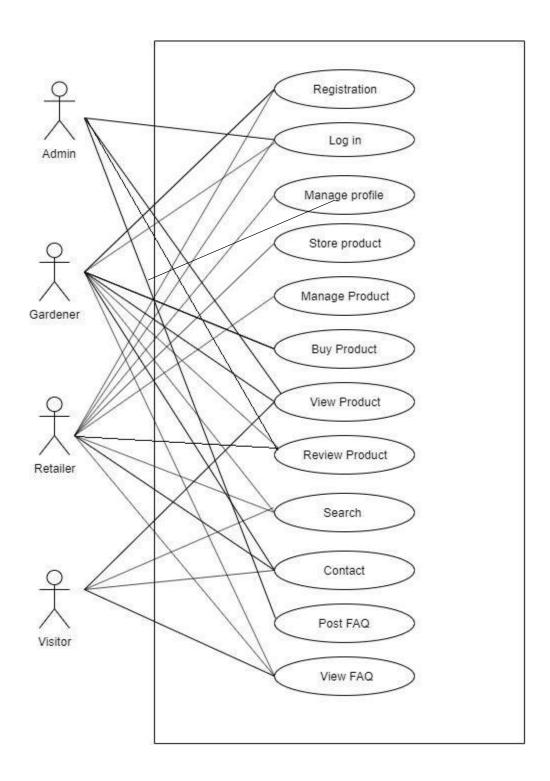


Figure 2: User Case of Flora Aid System

3.2. Use Case Description:

Table 02: Use Case Description of Registration

Use case name:	Registration	
Use case no	01	
Goal		To be registered to enter the into the system
Preconditions	Must be email and valid password for login.	
Primary Actors:	Admin, Gardener, Retailer	
Secondary Actors:	None.	
Trigger	This will be a default function for the system.	
Description / Main Success Scenario	Step	Action
Success Scenario	1	Registration Confirmation message
	2	Get access into system as user
Alternative Flows		N/A
Quality Requirements		N/A

Table 03: Use Case Description of Log in

Use case name:	Login
Use case no	02
Goal	To enter in to the system
Preconditions	Must be email and valid password and valid credentials for registration
Primary Actors:	Admin, Gardener, Retailer

Secondary Actors:	None.			
Trigger	This will be a default function for the system.		This will be a default function for the system.	
Description / Main Success Scenario	Step	Action		
Success Scenario	1	Confirm valid email address.		
	2	Confirm valid password .		
Alternative Flows		N/A		
Quality Requirements		N/A		

Table 04: Use Case Description of Manage Profile

Use case name:	Manage Profile		
Use case no	03		
Goal		To manage user's profile	
Preconditions		Have to be a Registered User	
Primary Actors:		Admin, Gardener, Retailer	
Secondary Actors:	None.		
Trigger	This will be a default function for the system.		
Description / Main Success Scenario	Step	Action	
Success Section 10	1	Actor can manage his/her profile	
	2	Information Edit/update/delete may have done	
Alternative Flows		N/A	

Quality	N/A
Requirements	

Table 05: Use Case Description of Store Product

Use case name:	Store Product		
Use case no	04		
Goal		To sell plants or products	
Preconditions		Must have to be a Retailer to sell.	
Primary Actors:		Retailer	
Secondary Actors:		None.	
Trigger	This will be a default function for the system.		
Description / Main Success Scenario	Step	Action	
Success Scenario	1	Retailer can post their desired products.	
	2	Visitor, Gardener, Admin will see the posts.	
Alternative Flows	N/A		
Quality Requirements		N/A	

Table 06: Use Case Description of Manage Product

Use case name:	Manage Product
Use case no	05
Goal	To manage posted posts
Preconditions	Only for existed posts
Primary Actors:	Admin, Retailer

Secondary Actors:	None.	
Trigger	,	This will be a default function for the system.
Description / Main Success Scenario	Step	Action
Success Section 10	1	Get to check if posts are appropriate or not.
	2	Can edit/ update/ delete post .
Alternative Flows		N/A
Quality Requirements		N/A

Table 07: Use Case Description of Buy Product

Use case name:		Buy Product	
Use case no		06	
Goal		To buy plants or products	
Preconditions		Must have to be a registered actor to buy.	
Primary Actors:		Retailer	
Secondary Actors:	None.		
Trigger	This will be a default function for the system.		
Description / Main Success Scenario	Step	Action	
Success Scenario	1	Get desired product.	
	2	Visitor, Gardener, Admin will see the posts.	
Alternative Flows		N/A	

Quality	N/A
Requirements	

Table 08: Use Case Description of Review Product

Use case name:	Review Product			
Use case no		07		
Goal		To post review about products		
Preconditions		Must have to be a registered user		
Primary Actors:		Retailer, Gardener, Admin		
Secondary Actors:	None.			
Trigger	This will be a default function for the system.			
Description / Main Success Scenario	Step	Action		
Success Scenario	1	A report giving someone's opinion about product		
	2	Everyone will see the reviews, but only a registered user can post for a review.		
Alternative Flows		N/A		
Quality Requirements		N/A		

Table 09: Use Case Description of Search

Use case name:	Search
Use case no	08
Goal	To search plants or products
Preconditions	Must have to enter the system
Primary Actors:	Anyone

Secondary Actors:	None.	
Trigger		This will be a default function for the system.
Description / Main Success Scenario	Step	Action
Success Section 10	1	To go through or look around carefully and thoroughly in an effort to find products
	2	Everyone can search & see
Alternative Flows		N/A
Quality Requirements		N/A

Table 10: Use Case Description of Contact

Use case name:	Contact	
Use case no		09
Goal	То со	ontact for ensure a shopping or get to know about the system
Preconditions		You have to enter the system
Primary Actors:		Admin, Gardener, Retailer, Visitor
Secondary Actors:	None.	
Trigger	This will be a default function for the system.	
Description / Main Success Scenario	Step	Action
Success Section 10	1	Go to contact option to contact
	2	Get contact result
Alternative Flows		N/A

Quality	N/A
Requirements	

Table 11: Use Case Description of Post FAQ

Use case name:	Post FAQ		
Use case no	10		
Goal	To poses a series of common questions and answers on a specific topic		
Preconditions		Must have to be admin	
Primary Actors:		Admin	
Secondary Actors:	None.		
Trigger	This will be a default function for the system.		
Description / Main Success Scenario	Step	Action	
Success Scenario	1	Admin will post common asked questions and answers on a particular topic	
	2	Visitor, Gardener, Retailer will see the posts.	
Alternative Flows		N/A	
Quality Requirements		N/A	

Table 12: Use Case Description of View FAQ

Use case name:	View FAQ
Use case no	11
Goal	To get asked questions and answers on a particular topic
Preconditions	Must have to be Admin

Primary Actors:	Admin.	
Secondary Actors:	None.	
Trigger	This will be a default function for the system.	
Description / Main Success Scenario	Step	Action
Success Section 10	1	Users can get common knowledge gaps
	2	Visitor, Gardener, Retailer will see the posts.
Alternative Flows		N/A
		N/A
Quality Requirements		N/A

3.2. Activity Diagram

We have prepared some activity diagram according to our use case. These activity diagrams visually presents a series of actions or flow of control in our system.

3.2.1 User Registration

After entering into the system user need to registered themselves for doing further operations.

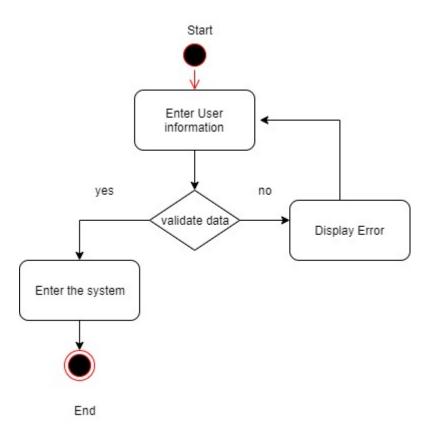


Figure 3: Activity Diagram for User Registration

3.2.2 User Log In

Admin or Retailer or Gardener enter the url and after successfully enter then enter login panel then input valid email and password. After successfully enter press login than if it's correct then login authorize panel.

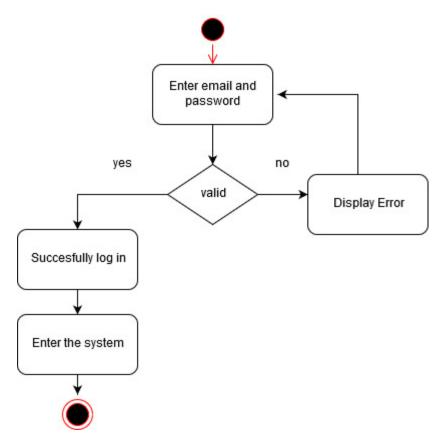


Figure 4: Activity Diagram for User Log In

3.2.3 User Profile Manage

Logged in users can update their information by managing their profile.

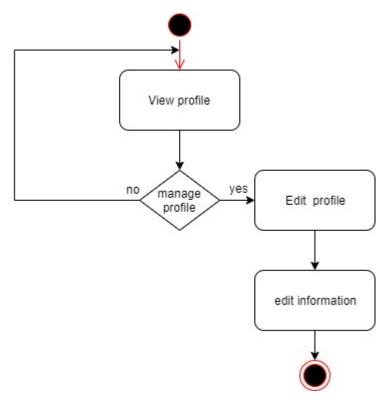


Figure 5: Activity Diagram for User Profile Manage

3.2.4 Store Product

In our system retailer can post for sell. Before that Retailer have to store it first. Retailer can input product information and store product.

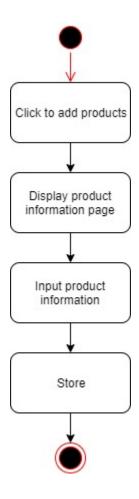


Figure 6: Activity Diagram for Store Product

3.2.5 Manage Product

Admin and Retailer can manage product post. They can delete product post which is not appropriate.

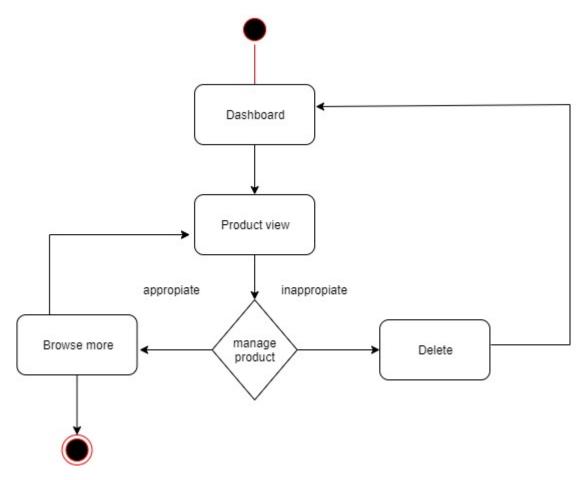


Figure 7: Activity Diagram for Manage Product

3.2.6 Buy Product

Registered user can add their need products in the cart and buy them .

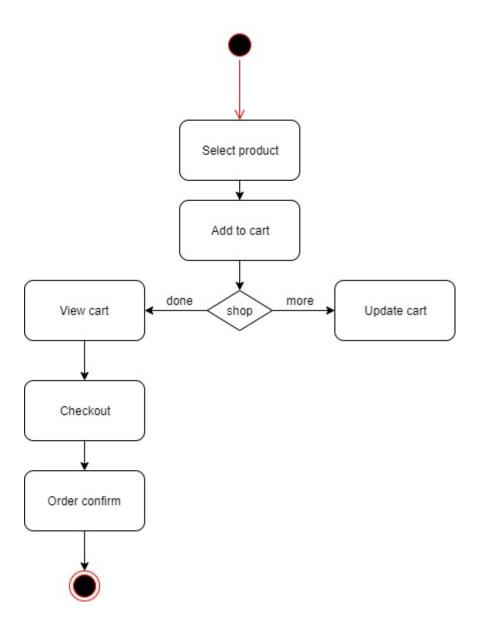


Figure 8: Activity Diagram for Buy Product

3.2.7 Review product

A review written by a registered user for a product based on their experience of the reviewed product.

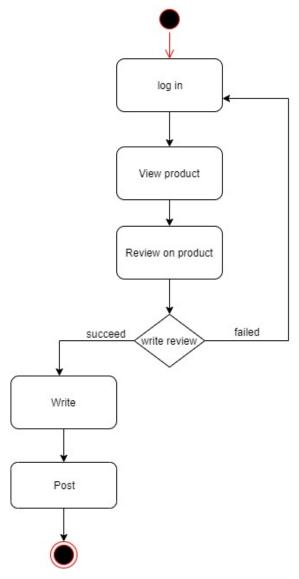


Figure 9: Activity Diagram for Review Product

3.2.8 Search

When someone will enter to the system they can try to find something by looking or otherwise seeking carefully and thoroughly.

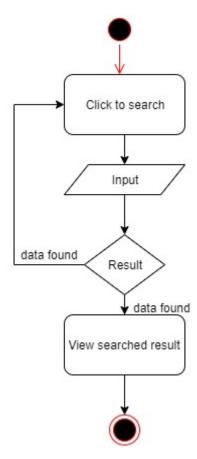


Figure 10: Activity Diagram for Search

3.2.9 Contact

An information which any one can use to reach the system. There will be so many ways to contact.

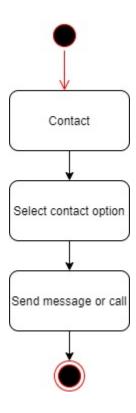


Figure 11: Activity Diagram for Contact

3.2.10 Post FAQ

Admin will post a list of questions and answers relating to a particular subject, especially one giving basic information for users of our system.

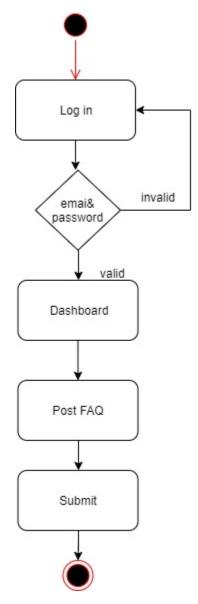


Figure 12: Activity Diagram for Post FAQ

3.2.11 View FAQ

Anyone who will enter into the system they can view the FAQ option. They will get to know about question and answers about particular topic.

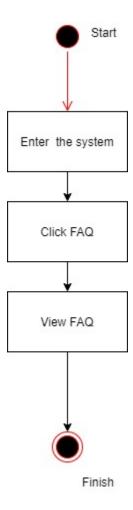


Figure 13: Activity Diagram for View FAQ

CHAPTER 04: SYSTEM DESIGN SPECIFICATION

4.1. Sequence Diagram:

Mainly sequence diagram is a type of interaction diagram because it describes how and in what order a group of objects works together. Now we are going to show some sequence diagrams of our system.

4.1.1. Registration:

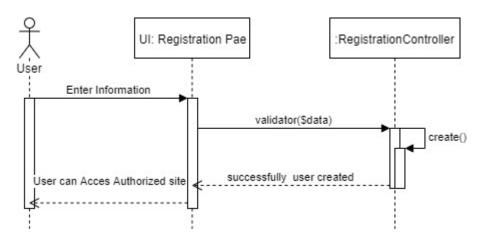


Figure 14: Sequence Diagram of log in for "Flora Aid"

4.1.2. Log In

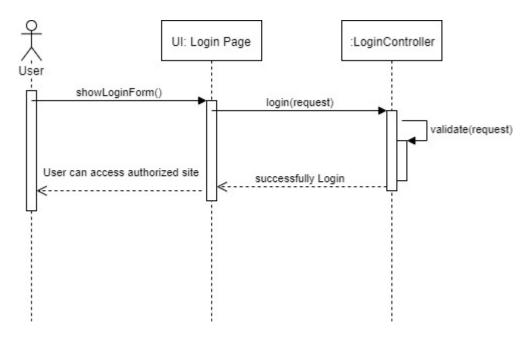


Figure 15: Sequence Diagram of Registration for "Flora Aid"

4.1.3 Manage Profile

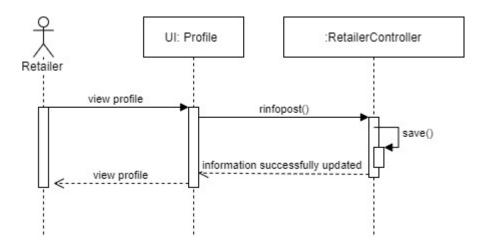


Figure 16: Sequence Diagram of Manage Profile for "Flora Aid"

4.1.4. Store Product

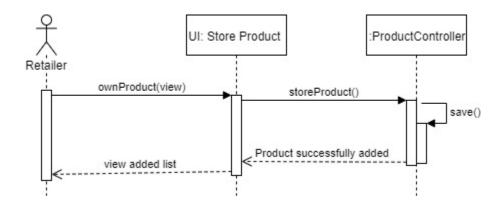


Figure 17: Sequence Diagram of Store product for "Flora Aid"

4.4.5. Manage Product

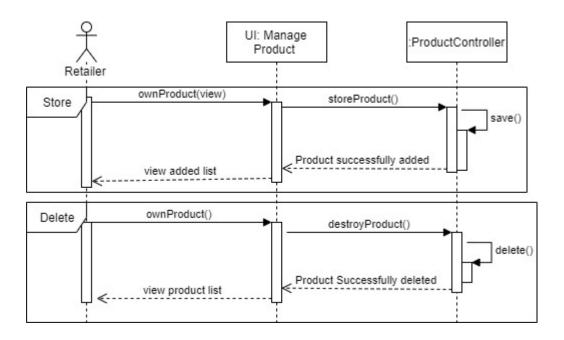


Figure 18: Sequence Diagram of Manage Product for "Flora Aid"

4.1.6. Buy Product

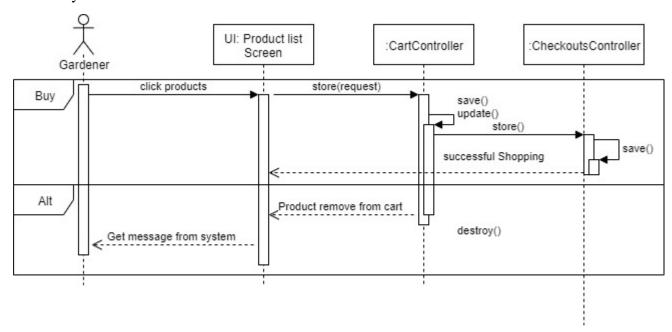


Figure 18: Sequence Diagram of Buy Product for "Flora Aid"

4.1.7. Review Product

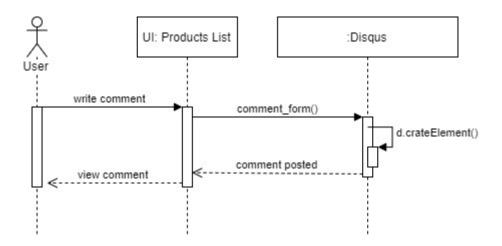


Figure 19: Sequence Diagram of Review Product for "Flora Aid"

4.1.9. Search

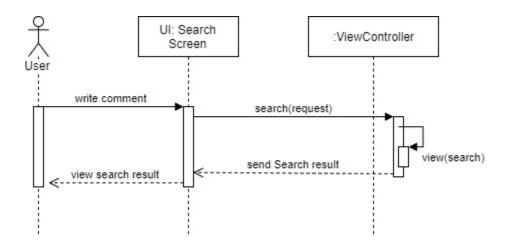


Figure 20: Sequence Diagram of Search for "Flora Aid"

4.1.10. Contact

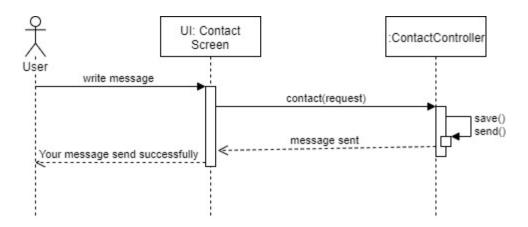


Figure 20: Sequence Diagram of Contact for "Flora Aid"

4.1.11. Post FAQ

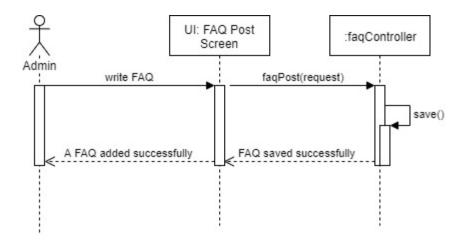


Figure 20: Sequence Diagram of Post FAQ for "Flora Aid"

4.1.12. View FAQ

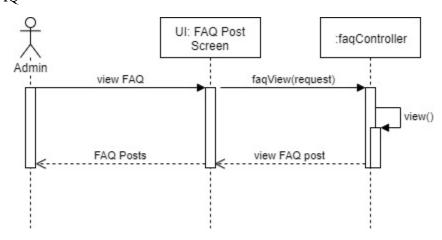


Figure 20: Sequence Diagram of View FAQ for "Flora Aid"

4.2. Class Diagram:

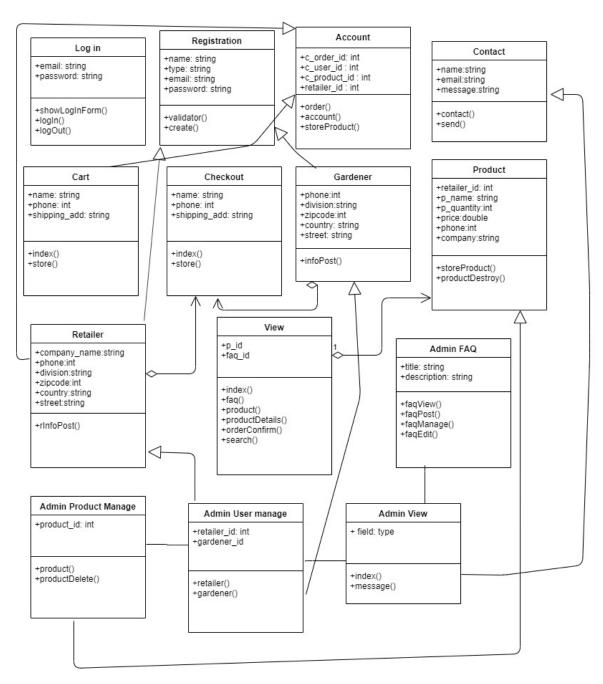


Figure 21: Class Diagram of 'Flora Aid'

4.3. Entity Relationship Diagram

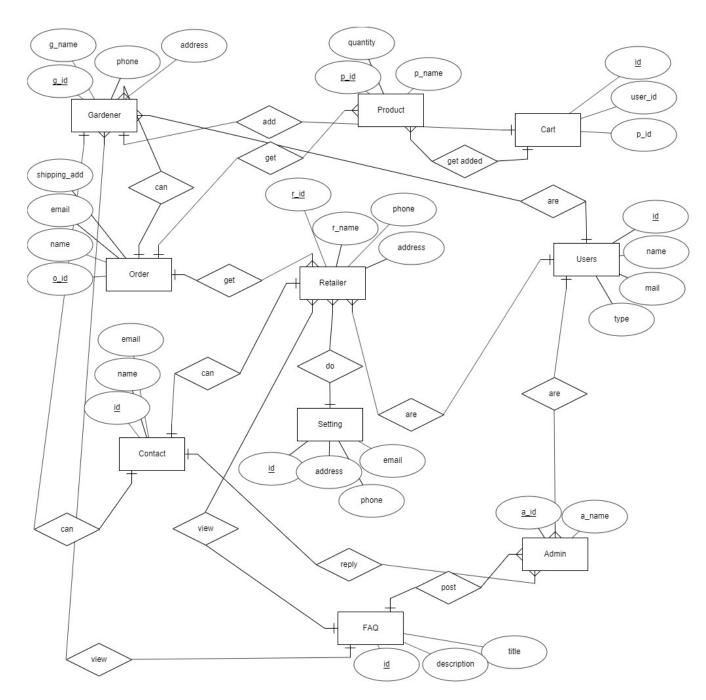


Figure 23: Entity Relationship Diagram

4.4. Schema Diagram

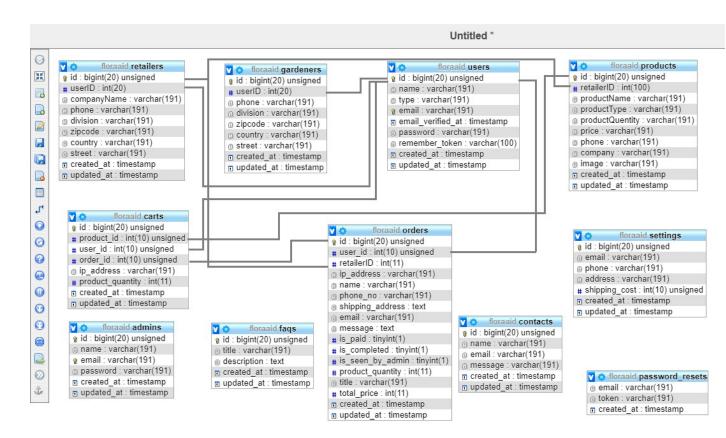


Figure 24: Schema Diagram

4.5. Development of Tools and Technology

4.5.1. User Interface Technology

- 1. HTML5
- 2. CSS3
- 3. Bootstrap 4
- 4. JavaScript
- 5. SASS
- 6. ¡Query Plugins
- 7. Brackets Editor

4.5.2. Implementation Tools & Platforms

- 1. Object-Oriented PHP
- 2. MySQL

- 3. Xammp
- 4. Laravel Framework
- 5. Windows PowerShell/CMD
- 6. Atom IDE

CHAPETR 05: SYSTEM TESTING

5.1. Testing Features

5.1.1. Feature to be tested

- 1. Registration
- 2. Login
- 3. Buy Products

5.1.2. Feature not to be tested

- 1. Manage Profile
- 2. Blood Donor Update Status

5.2. Testing Strategies

5.2.1. Test Approach

- 1. The system will manually tested.
- 2. The system testing is based on user acceptance.

5.2.2. Pass/Fail Criteria

- 1. Component Pass/Fail criteria The test will pass if the case meet the object design requirement or fail if not.
- 2. Integration Pass/Fail criteria The test will pass if the case meet the object design architecture requirement or fail if not.
- 3. System Pass/Fail criteria The test will pass if the case meet the functional and non-functional requirements or fail if not.

5.2.3. Suspension and Redemption

- 1. Build Acceptance Test The system will pass the test if every build is successful if not than try build again.
- 2. Regression Testing The system should work properly after each change on the system.
- 3. System Design Changes The system should work properly after each change in the design.

5.2.4. Testing Schedule

Table 16: Testing Schedule

Test Phase	Time	Owner
Test Plan Creation	1 week	Mehnaz Islam Mohona
Test Specification Creation	1 week	Mehnaz Islam Mohona
Test Specification Team Review	2 weeks	Mehnaz Islam Mohona
Component Testing	2 weeks	Mehnaz Islam Mohona
Integration Testing	2 weeks	Mehnaz Islam Mohona
System Testing	3 weeks	Mehnaz Islam Mohona

5.3. Test Cases

5.3.1. Test Case: 01

Table 17: Test Case-01

Test Case #: 01	Test Case Name : Registration
System:Flora Aid	Subsystem: N/A
Designed By:	Design Date : 27-11-2019

Mehnaz Islam Mohona (153-35-1363)	
Executed By : Mehnaz Islam Mohona	Execution date: 29-11-2019

Pre-Condition: User may registered as Gardener or Retailer depends on them.

Step	Action	Expected System Response	Pass/Fail	Comment
1.	When a user fill up only Name field and Click register	Other fields are required	Pass	Other fields are required
2.	When a user click only register button without fill up any field	Fill up the required field	Pass	Fill up the required field
3.	When a user enters email like Xyz.com	The system should display the email field is not a valid e-mail address.	Pass	The email field is not a valid e-mail address.
4.	When a student enter email like helpdesk@flora.co	The system should take it as a valid email.	Pass	It as a valid email.
5.	When a user enter phone number as character	The system should display the field phone number must be a number.	Pass	The field phone number must be a number.
6.	When a user remain password and confirm	When click register button the system should display the password and	Pass	The password and confirm

	password field empty.	confirm password field is required.		password field is required.
7.	When a user enter password like '123' and confirm password like 1234	When click register button the system should display the password and confirmation password do not match.	Pass	The password and confirmatio n password do not match.
8.	If a user enter password like '1234' and confirm password field empty.	The confirmation password is required.	Pass	The confirmatio n password is required.
9.	If a user enters the password like 'Saidi_101' have at least 8 characters	The system should take it as a valid password.	Pass	It as a valid password.
10.	When a user filled with all required field with valid information.	The registration process will be competed and redirect to home page.	Pass	The registration process will be competed and redirect to home page.

5.3.2. Test Case: 02

Table 18: Test Case-02

Test Case #: 2	Test Case Name: Log in
System : Flora Aid	Subsystem: N/A

Designed By:	Design Date:27-11-2019
Mehnaz Islam Mohona (153-35-1363)	
Executed By:Mehnaz Islam Mohona	Execution date: 29-11-2019

Pre-Condition: Must be registered for access to his/her account.

St ep	Action	Expected System Response	Pass/Fail	Comment
1.	Enter the email without password.	The system will display the message: password field is required.	Pass	Password field is required.
2.	When a user enter password without email	Email field is required.	Pass	Email field is required.
3.	When a user click the sign in button without the email and password field	Email and password is required.	Pass	Email and password is required.
4.	When a user enter the valid email and wrong password	The system will display: invalid login attempts.	Pass	Invalid login attempts.
5.	When a user enter wrong email and wrong password	The system will display: invalid login attempts.	Pass	Invalid login attempts.
6.	When a user enter valid email and valid password	The system will successfully access to the account and redirect to the login page.	Pass	The system will successfull y access to the account and redirect to the login page.

Table 18: Test Case-03

Test Case #: 3	Test Case Name: Buy Products
----------------	------------------------------

System :Flora Aid	Subsystem: N/A
Designed By:	Design Date:27-11-2019
Mehnaz Islam Mohona (153-35-1363)	
Executed By: Mehnaz Islam Mohona	Execution date: 29-11-2019

Pre-Condition: Must be registered for access to his/her account.

Step	Action	Expected System Response	Pass/Fail	Comment
1.	Enter the system & click on product.	The system will display the list of products.	Pass	No product to show.
2.	When a user click on cart without log in.	User need to log in first.	Pass	Log in is required.
3.	When a user click the cart without adding product in cart.	No product is added in the cart.	Pass	Have to add a product in the cart.
4.	When a user go for checkout without fill up phone no.	The phone fill is required.	Pass	Fill up all the required fills
5.	When a user enter all the required information.	The order will be confirmed.	Pass	Successfull y ready to buy the product.

CHAPTER 06: USER MANUAL

6.1 Registration (Both user):

Users both Retailer and Gardener register their self by providing necessary information.

Name		
Select Type	Select User Type	
E-Mail Address		
Password		
Confirm Password		

If you are a register member, please go for Login

Figure 25: Registration (Retailer)

6.2 User Sign In (Both User):

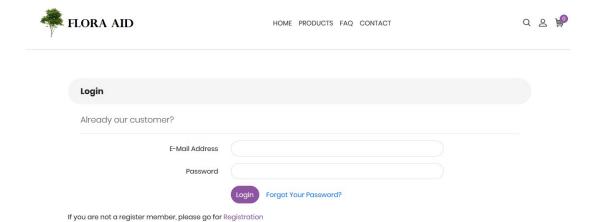


Figure 26: User Login (Both User)

6.3. Gardener Info:

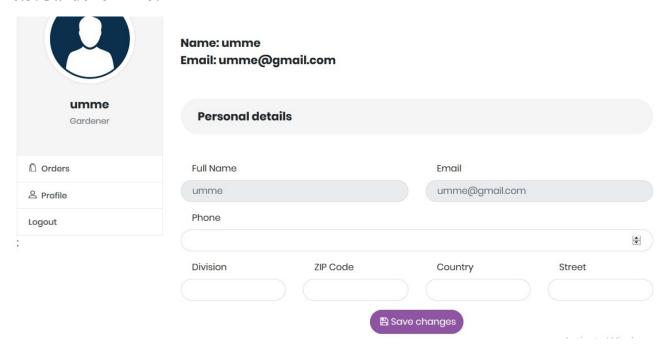


Figure 27: Information (Gardener)

6.4 Gardener Order list:

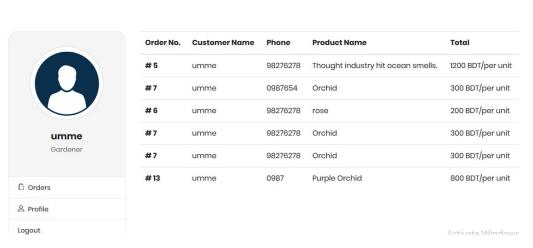


Figure 28: Gardener order list

6.5 Gardener Added to Cart:

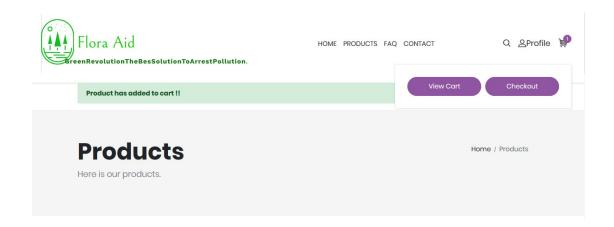


Figure 29: Gardener added to cart

6.6 View Cart:

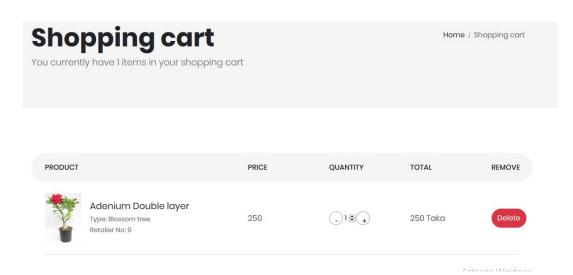


Figure 30: View Cart

6.7. Checkout:

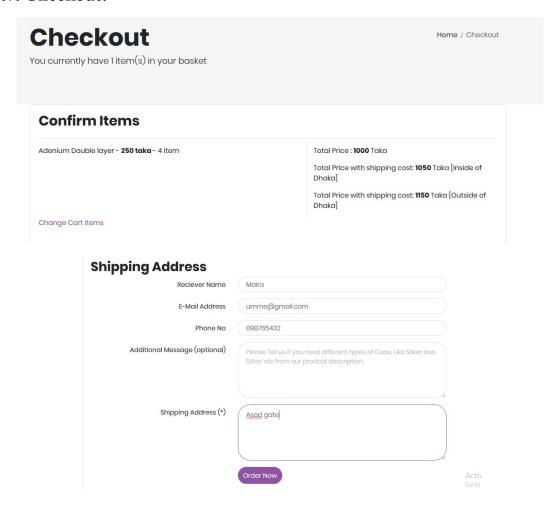


Figure 31: Checkout

6.8. Order Confirmation:

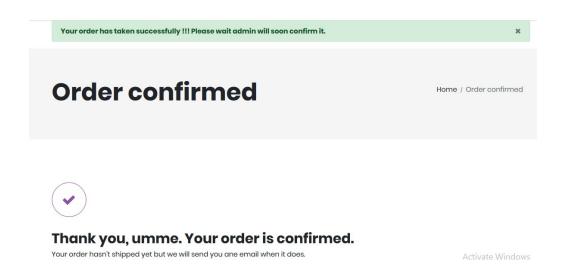


Figure 32: Order Confirmation

6.9. Retailer Information:

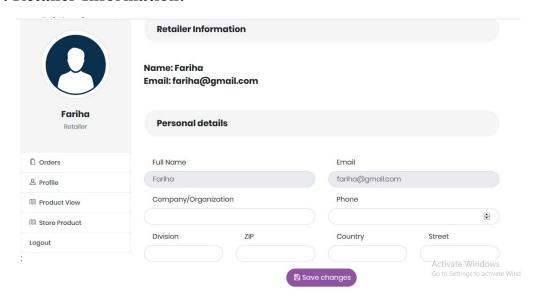


Figure 33: Information (Retailer)

6.10.Retailer Product Store:

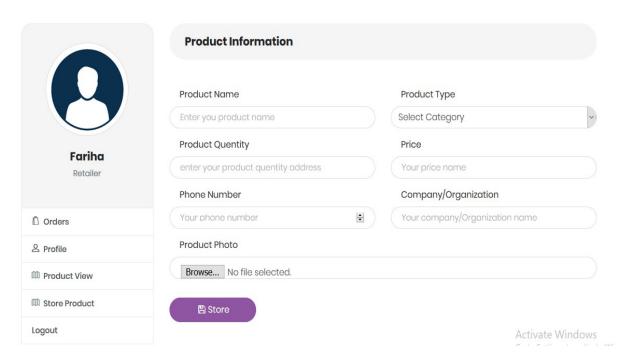


Figure 34: Retailer product store

6.11. Retailer Product Manage:

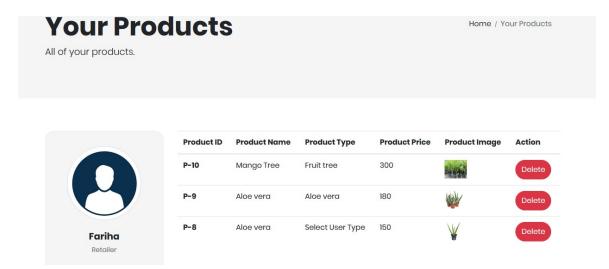


Figure 35: Product Manage (Retailer)

6.12. Admin Log in:

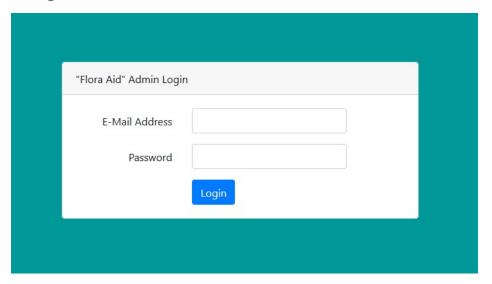


Figure 36: Log In (Admin)

6.13. Admin Dashboard:

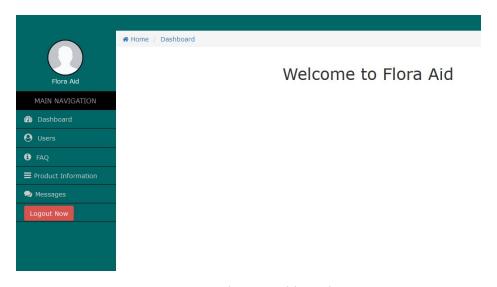


Figure 37: Admin Dashboard

6.14. Admin Product Manage:

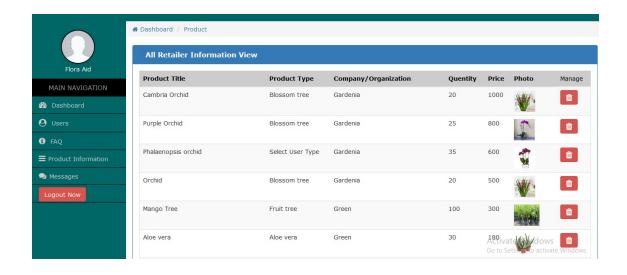


Figure 38: Product Manage (Admin)

6.15. Admin FAQ Post:

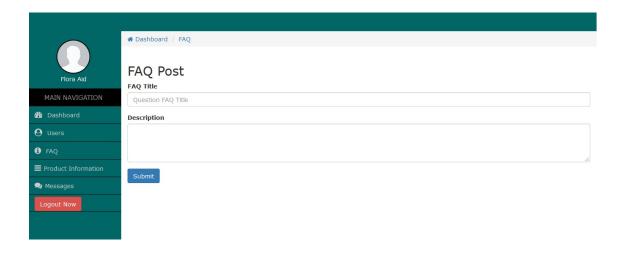


Figure 39: Admin Post FAQ

6.16. Admin FAQ Manage:

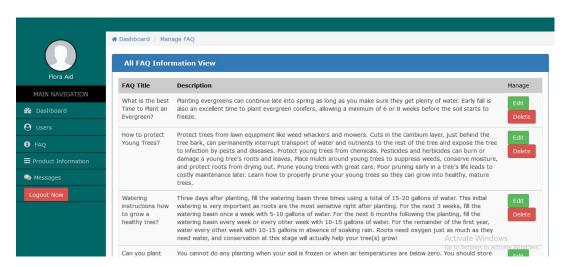


Figure 40: Admin Manage FAQ

6.17. User Information (Gardener):



Figure 41: User Information (Gardener)

6.18. User Information (Retailer):

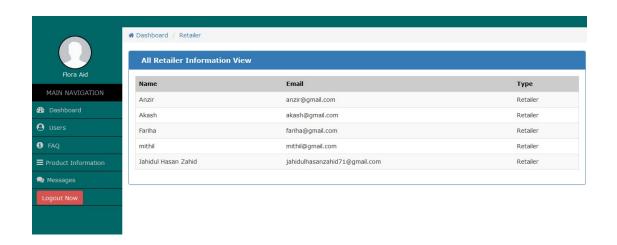


Figure 42: User Information (Retailer)

6.19. Contact:

Contact

Home / Contact



Address

13/25 New Avenue New Heaven, Lalmatiya 73 Dhaka, **Bangladesh**



Call center

This number is toll free if calling from Great Britain otherwise we advise you to use the electronic form of communication.

+33 555 444 333



Electronic support

Please feel free to write an email to us or to use our electronic ticketing system.

- admin@floraaid.com
 Ticketio our ticketing support
- platform

Contact form

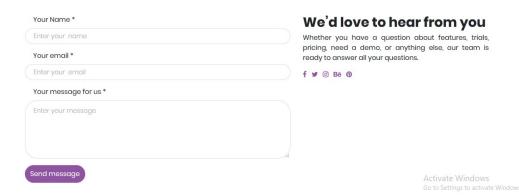




Figure 43: Contact (Admin)

CHAPTER 07: PROJECT SUMMARY

7.1. GitHub Link

https://github.com/mehnazmohona/Flora-Aid

7.2. Limitations

1. In this system gardener can't sell their extra plants/vegetables.

2. Web based system. So users have to use internet to get in to web site.

3. No android version. Mobile is a portable device. So, Most of the people choose

android version for any system though this hasn't android version.

7.3. Obstacles & Achievements

The laravel MVC framework is updating every day so it's quite tough to work with new

technology. The library function of PHP laravel and its community is also very helpful

though the implementation is hard and there was lots of error while developing this

system.

Before starting this project I didn't know about actual flow of the software development

life cycle and I didn't use documentation properly but working on this project I finally

get chance to fix my limitation at those aspects.

With the help of my supervisor's I have revised and learnt crucial topics like system

requirement specification, system analysis. I think in this project obstacles helped me a

lot to learn.

7.4. Future Scope

This system is for Gardener and Retailers who sell gardening ornaments, accessories, plants and products, so there is a lot of hope for this system in near future. Because in this era of dust a gardener can produce fresh air and home made vegetable for his/herself and also for family.

Though this system still not has a lot of feature, I have future release plan for the system when new technology and feature will be added in term of helping gardeners and retailers system will have rich information which help to increase gardening and a way to earn extra.

Conclusion

Though I have successfully implemented the system "Flora Aid" but there also some restriction in my project. Now this web system is using "local host". In near future domain should be taken and launch this web application. Alhamdulillah, I have developed the system for my university this makes me proud.

Appendix

May include any supporting material which is not essential for the main body of the report, these could be-

- > User Manual or Guide
- > Tables
- > Details Requirements
- Diagrams
- > Test Plans and results

References

- [1]. Database design and diagram [Access on 20 October 2019]

 Erdplus.com
- [2]. Activity Diagram, Use case Diagram, Class Diagram [Access on 20 August 2019]

 Draw.io
- [3]. Book: Developing software with UML Author: Bernd Oestereich [Second Edition], Chapter 5, Section 5.3 Use case Diagrams, Page. 161
- [4]. Book: Developing software with UML Author: Bernd Oestereich [Second Edition], Chapter 5, Section 5.3 Class Diagrams (Relational Elements), Page. 219
- [5]. Book: Developing software with UML Author: Bernd Oestereich [Second Edition], Chapter 3, Section 3.2 Developing the System Idea and Objective, Page. 64