



Project Documentation on Farming24

Submitted by:

Sabina Yesmin Anika

Id: 181-35-2406

Department of Software Engineering

Daffodil International University

Supervised by:

Khaled Bin Badruzzaman Biplob

Lecturer (Senior Scale)

Department of Software Engineering

Daffodil International University

Date: 5th January, 2022

Approval

APPROVAL

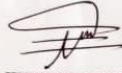
This project titled "Farming 24", submitted by Sabina Yesmin Anika, ID: 181-35-2406 to the Department of Software Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Software Engineering and approval as to its style and contents.

BOARD OF EXAMINERS



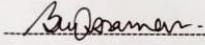
Chairman

Dr. Imran Mahmud
Associate Professor and Head
Department of Software Engineering
Daffodil International University



Internal Examiner 1

Nusrat Jahan
Assistant Professor
Department of Software Engineering
Daffodil International University



Internal Examiner 2

Khalid Been Badruzzaman Biplob
Senior Lecturer
Department of Software Engineering
Daffodil International University



External Examiner

Professor Dr M Shamim Kaiser,
Professor
Institute of Information Technology
Jahangirnagar University

DECLARATION

DECLARATION

It hereby declares that this project has been done by **Sabina Yesmin Anika** under the supervision of **Mr. Khalid Been Badruzzaman Biplob, Lecturer (Senior Scale)**, Department of Software Engineering, Daffodil International University. It also declares that neither this project nor any part of this has been submitted elsewhere for award of any degree.



Student Name: Sabina Yesmin Anika

Student ID: 181-35-2406

Batch: 25th

Department of Software Engineering

Faculty of Science & Information Technology

Daffodil International University

Certified by:



Mr. Khalid Been Badruzzaman Biplob

Lecturer (Senior Scale)

Department of Software Engineering

Faculty of Science & Information Technology

Daffodil International University

ACKNOWLEDGEMENT

First of all, I would like to thank almighty Allah for giving me the proper time to complete the project. Then I want to thank our respectable supervisor “Khaled Bin Badruzzaman Biplob” Faculty of Software Engineering, Daffodil International University, Dhaka for her fabulous direction and for having belief in my capability to total this project. I want to express our heartiest gratitude to the Head, Department of SWE, for encouraging me and providing me with such an opportunity.

I am thankful to my guardians as well as family individuals for their understanding, support, and endless back all through the term of my consider. I would like to expand my best wishes to all the teachers, companions, and staff individuals of our division.

Contents

Approval	i
DECLARATION	ii
ACKNOWLEDGEMENT	iii
CHAPTER-01	1
INTRODUCTION	1
1.1 Introduction	1
1.2 Overview	2
1.3 Project purpose:.....	2
1.4 Background	3
1.5 Benefit.....	3
1.6 Goals:	3
1.7 Stakeholders:	4
1.7.1 Admin:.....	4
1.7.2 Farmer:.....	4
1.7.3 Agriculture Specialist:	4
1.8 Project Schedule:	5
Farmer24 has also a schedule till release. These time schedules are given below:	5
CHAPTER 02	6
SYSTEM ANALYSIS	6
2.1 Requirement Analysis	6
2.2 Requirement Gathering	6
2.3 Feature	6
2.4 Requirement Specification.....	7
2.4.1 Functional Requirement:	7
2.4.2 Non-Functional Requirement	9
2.5 Use Case of proposed System:.....	12
2.5.1 Use-Case Description :	13
CHAPTER 03	20
SYSTEM DESIGN	20
3.1 Activity Diagram	20
3.1.1 Activity Diagram for Farmer.....	20

Figure 2: Activity Diagram for farmer.....	20
3.1.2 Activity Diagram for agriculture specialist	21
3.1.3 Activity Diagram for login	22
3.1.4 Activity Diagram for a set schedule	23
3.1.5 Activity Diagram for take appointment	24
3.2 Class Diagram.....	25
3.3 ER Diagram.....	26
3.4 Sequence Diagram	27
3.4.1 Sequence Diagram for login.....	27
CHAPTER 04	28
SYSTEM TEST AND DEVELOPMENT	28
Introduction:	28
CHAPTER 05	38
USER MANUAL	38
5.1 Introduction	38
CHAPTER 06:	47
CONCLUSION	47
6.1 Conclusion:.....	47
6.2 Reference:	47
Plagiarism Report:.....	47

List of Figure

Figure 1: Use Case Diagram	12
Figure 2: Activity Diagram for farmer	20
Figure 3: Activity Diagram for Agriculture Specialist	21
Figure 4: Activity Diagram for login	22
Figure 5: Activity Diagram For Set schedule	23
Figure 6: Activity diagram for take appointment	24
Figure 7: Class Diagram	25
Figure 8: ER Diagram	26
Figure 9: Sequence Diagram for login	27
Figure 10: Home Page	38
Figure 11: Category	39
Figure 12: Category	39
Figure 13: Registration	40
Figure 14: Specialist	40

Figure 15: specialist	41
Figure 16: Category	41
Figure 17: Farmer registration	42
Figure 18: Farmer approval request page	42
Figure 19: Admin Dash board	43
Figure 20: Manage specialist account	43
Figure 21: Specialist Dashboard	44
Figure 22: Specialist Profile	44
Figure 23: Message option	45
Figure 24: Category manage	45
Figure 25: Gallery Setting	46
Figure 26: Gallery	46

List of Table

Table 1: Schedule Table.....	5
Table 2: Registration for Users (farmer, agriculture specialist).....	7
Table 3: Log in for Farmer, agriculture specialist, admin.....	7
Table 4: Logout for Normal Farmer, Agriculture Specialist, Admin.....	7
Table 5: Appointment by Agriculture Specialist	8
Table 6: Took appointment by farmer	8
Table 7: View Expert details by Farmer	8
Table 8: Send message by the farmer and agriculture specialist	9
Table 9: Manage Users by admin	9
Table 10: Usability.....	9
Table 11: Performance	10
Table 12: Reliability	10
Table 13: Supportability	10
Table 14: Operation	10
Table 15: Accuracy	11
Table 16: Data Capability	11
Table 17: Privacy	11
Table 18: Register.....	13
Table 19: Approve Registration.....	13
Table 20: Login.....	14
Table 21: View Profile.....	14
Table 22: View Expert	15
Table 23: View Category	15
Table 24: Take Appointment	16
Table 25: Send Message	16
Table 26: Submit Feedback	17
Table 27: View Expert Dashboard.....	17
Table 28: Get Notification	18
Table 29: Set schedule	18

Table 30: Conversation	19
Table 31: Registration.....	29
Table 32: Login.....	30
Table 33: Profile	31
Table 34: Appointment	32
Table 35: Notification	33
Table 36: Feedback	33
Table 37: Dashboard.....	34
Table 38: Schedule.....	35
Table 39: Conversation	35

CHAPTER-01

INTRODUCTION

1.1 Introduction

Bangladesh is an agricultural country. The biggest part of the country's economy comes from this agricultural work. Because about 75% of the people in this country live in villages. According to those statistics, about 59.64% of the people in rural areas of Bangladesh and 10.61% of the people in urban areas have farms. The contribution of the agriculture sector to the GDP is 19.1% and employment of 47.1% of people is being created through the agriculture sector. But even after all this, the communication or transportation system of the farmers is lagging behind the people of other professions.

I hope online communication will solve this problem.

Usually, the farmers of Bangladesh cultivate in the old way. Most farmers still depend on plows, ladders, and cows for crop production and processing. The agricultural communication system is also not very far-reaching.

However, in recent times, Bangladesh's agricultural development has gradually started relying on information technology, which has been the most during the time of this Corona. Because online is now a powerful platform where farmers can easily communicate with each other at home, any situation or problem can talk to any agricultural consultant very quickly, they do not have to waste miles and miles. You can even learn a lot about agriculture online. Many farmers are now trying to make use of various modern agricultural technologies.

Farmers and agricultural consultants will be able to exchange information about agriculture using the agriculture website. Moreover, this website will be a very convenient and suitable environment for the farmers. The agriculture website offers the opportunity to communicate with any consultant from any part of the country in a very short time. Even in the 21st century, many still think that farmers live in villages and are not aware of or interested in information technology. But this idea is completely wrong. In tandem with others, farmers are also slowly becoming more reliant on online farming. The Bangladesh government is doing a lot of work on this. This online website will also be useful for them.

1.2 Overview

Farming24 is an agriculture-based website where any farmer in Bangladesh can easily and in less time contact any agricultural consultant of their choice. For this, first, both the farmer and the agricultural consultant have to register and log in to the website by providing certain information. Farmers will then be able to message agricultural advice or jigsaw with product pictures or videos to solve any problem with agricultural products or agricultural work.

Then when the farmer sends a message to the agricultural consultant, the agricultural consultant will get a notification, due to which he will understand that any farmer is asking for his help.

Internet is slowly becoming available in rural areas of Bangladesh. Due to which farmers nowadays have started relying on the internet for their agricultural work advice. Because it reduces both their time and cost and they can spend more time on the field.

1.3 Project purpose:

The communication system of rural areas of Bangladesh is still developing. Yet farmers travel long distances to the agricultural office for good or bad advice on their produce. Which becomes costly and time-consuming for them.

Moreover, information technology is gradually being added to the field of agriculture. Farmers are being imparted knowledge about new products and cultivation online, especially during Corona.

Similar services will be provided on our website. They will be able to take advice from the work of agricultural consultants very quickly online any problem of the product while working in agriculture.

In doing so, they do not have to waste time traveling long distances. In the same way, there will be no damage to the product in the hope of a timely and proper solution.

Farmers could not get proper cultivation advice for Corona. Although everything is getting normal now, we are developing our website for farmers thinking about the future.

1.4 Background

During the Corona period, the situation of an agricultural communication system in Bangladesh became tenser. Earlier, farmers used to go to the nearest agriculture office for all kinds of advice including cultivation, plowing, planting seeds, soil preparation, fertilizer. In the rural areas, the agricultural consultants would visit them from time to time through various small arrangements and discuss the details of agriculture in different seasons and would give solutions after listening to everyone's problems.

It would have taken a lot of time.

But due to increasing social distance in Corona, almost all the farmers had to stay at home.

Could not collect, store and sell previously produced products.

Field crops are ruined due to a lack of proper advice from agricultural consultants or the inability to communicate at the right time. Even though everything is normal now, the agricultural communication system is not as good as before. They do not yet know in time or in any season which agricultural consultant they need help. This website will help us to keep all these communications at home.

1.5 Benefit

- * Receive any free agricultural advice.
- * Contact any agricultural consultant at any time according to their area of preference.
- * Inform the problem of the product through message or taking pictures.
- * 24 hours service.

1.6 Goals:

This project is about an agriculture website. Agriculture website is available but not all the websites provide proper and authentic communication scop. Also, modern farmers are passing through a busy life, they do not get too much chance to meet good agriculture specialists. So, this website will provide specialist appointments to the farmers. Any kind of agriculture helps us in our daily life. Also, this project will provide many functionalities. So, we can say, this farmer24 website will help farmers communicate easily.

1.7 Stakeholders:

There will be 3 types of stakeholders in 'farmer24'. Stakeholders are given below-

- Admin
- Agriculture Specialist
- Farmer

1.7.1 Admin:

Admin is super-user since each client must be affirmed by admin at the 1st time login in this venture. Client moreover can include client, square and evacuate fake client, too he can adjust them, can checkout security of this venture, keep up this security

1.7.2 Farmer:

The farmer will be able to log in when the admin will approve his or her registration. The Farmer can send messages to the specialist in this project and after that specialist will get a notification.

1.7.3 Agriculture Specialist:

Agriculture Specialist will be able to log in when admin will check his identity, NID, present office and then if this user is real admin will approve his registration. The specialist also can get a notification when any farmer sends a message to him/her on this website that is agriculture-related.

1.8 Project Schedule:

Farmer24 has also a schedule till release. These time schedules are given below:

Table 1: Schedule Table

Phase	Start Date	Planned submission Date	Working Day
Proposal	10 June 2021	20 June 2021	10
Requirements Collections	30 July 2021	20 August 2021	20
Requirements Analysis	20 August 2021	30 August 2021	10
Software Requirements Specification	1 September 2021	20 September 2021	20
Project Plan	1 October 2021	20 October 2021	20
Prototype Implementations	25 October 2021	20 November 2021	25
Testing & Result	1 December 2021	25 December 2021	25
Total Working Days = 130			

CHAPTER 02

SYSTEM ANALYSIS

2.1 Requirement Analysis

Some of the time as of late making any application, need examination is an especially imperative parcel. When necessities of clients are clear at that point wander gets to be standard and client neighborly. It may well be an arrangement that chooses the software's prerequisite and contains the goals and commitments of distinctive clients. An awesome application needs an incredible need examination.

2.2 Requirement Gathering

Gathering need is an outstandingly fundamental parcel for making an important and user-friendly application. Asking address to another person is the number one technique. But there are as well various ways like client centering locale, conceptualizing. As well as survey-related papers, journals from diverse sources. As well, recognition from the past wander can be flexible apps or sites for making this wander, we ought to review past Agribusiness destinations. At that point will take notes on which value is misplaced, which are functionalities arranged isn't awesome. As well, my director gave so various necessities which were executed in it.

2.3 Feature

There is a good number of features in this project. These are given below-

- Must login, Registration with admin approval
- Farmer and Agriculture Specialist cannot enter website until an admin approves their request
- Users can make appointments with Agriculture specialists.
- Agriculture specialist will provide an appointment to Farmer by messaging.
- Admin can remove farmer, agriculture specialist if it is necessary

2.4 Requirement Specification

2.4.1 Functional Requirement:

a functional requirement characterizes a function of a framework or its component, where a function is depicted as a detail of behavior between inputs and outputs. So, this Farming24 has many functional requirements that are given below-

Table 2: Registration for Users (farmer, agriculture specialist)

Requirement id: R-ID: 01
Name: All kinds of User Registration
Definition: Users have to provide valid input in the form for successful registration. Then only the agriculture specialists must have waited for admin approval. After that, he will get access to the panel
Stakeholders: Normal Farmer, Agriculture Specialist

Table 3: Log in for Farmer, agriculture specialist, admin

Requirement id: R-ID: 02
Name: All kinds of Users Login
Definition: Users have to provide a valid email and password in the input field for login. Also, users can store login information and cookies.
Stakeholders: Normal Farmer, Agriculture Specialist, Admin

Table 4: Logout for Normal Farmer, Agriculture Specialist, Admin

Requirement id: R-ID: 03
Name: All kinds of Users Logout
Definition: Users have to provide clear his or her login session by clicking logout. Then he or she will successfully log out.
Stakeholders: Normal Farmer, Agriculture Specialist, Admin

Table 5: Appointment by Agriculture Specialist

Requirement id: R-ID: 04
Name: Provide appointment
Definition: The agriculture Specialist will provide an appointment whenever he gets a notification from the farmer.
Stakeholders: Agriculture Specialist

Table 6: Took appointment by farmer

Requirement id: R-ID: 05
Name: took Appointment
Definition: If Farmer wants to know something, he can take appointments from available specialist appointment lists.
Stakeholders: Farmer

Table 7: View Expert details by Farmer

Requirement id: R-ID: 06
Name: View Expert details
Definition: If Farmer wants to see Agriculture Specialists or expert information.
Stakeholders: Farmer

Table 8: Send message by the farmer and agriculture specialist

Requirement id: R-ID: 07
Name: Send Message
Definition: When Farmer need to know anything about the farming products they can send a message to an agriculture specialist, and the specialist can reply to her/his message.
Stakeholders: Farmer, Agriculture specialist

Table 9: Manage Users by admin

Requirement id: R-ID: 08
Name: Manage Users
Definition: Admin can add, remove user
Stakeholders: Admin

2.4.2 Non-Functional Requirement

Nonfunctional Requirements (NFRs) characterize framework qualities such as security, reliability, execution, practicality, adaptability, and usability. They serve as limitations or confinements on the plan of the framework over the different backlogs. Non-functional requirement for this project is given below-

Table 10: Usability

Non-Functional Requirement id: NF-ID: 011
Name: Usability
Definition: This website will permit the users to enter the system from the internet using HTML or its derivative technology like CSS. A web browser is the main interface for the system. If users are familiar with internet web browsers, no extraordinary exercise is necessary. Using operation can operate the system since it has a user-friendly user interface. User can use it any time anywhere when he wants

Stakeholders: All users

Table 11: Performance

Non-Functional Requirement id: NF-ID: 022
Name: Performance
Definition: This Farming24 project operates its function in a small amount of time
Stakeholders: All users

Table 12: Reliability

Non-Functional Requirement id: NF-ID: 033
Name: Reliability
Definition: This Farming24 is accessible based on the farmer's needs. Can work appropriately and do exchanges productively. The unwavering quality of the general program depends on the unwavering quality of the isolated components. The most column of unwavering quality of the framework is the utilizing function.
Stakeholders: All users

Table 13: Supportability

Non-Functional Requirement id: NF-ID: 044
Name: Supportability
Definition: This Farming24 project operates in any operating system. Users have to use a mouse, keyboard, or touch screen.
Stakeholders: All users

Table 14: Operation

Non-Functional Requirement id: NF-ID: 055
Name: Operation

Definition: This Farming24 project system is controlled by the developer for safe work.
Stakeholders: All users

Table 15: Accuracy

Non-Functional Requirement id: NF-ID: 066	
Name: Accuracy	
Definition:	This Venture should accurately provide real-time data taking into regard different assentation issues.
Stakeholders: All users	

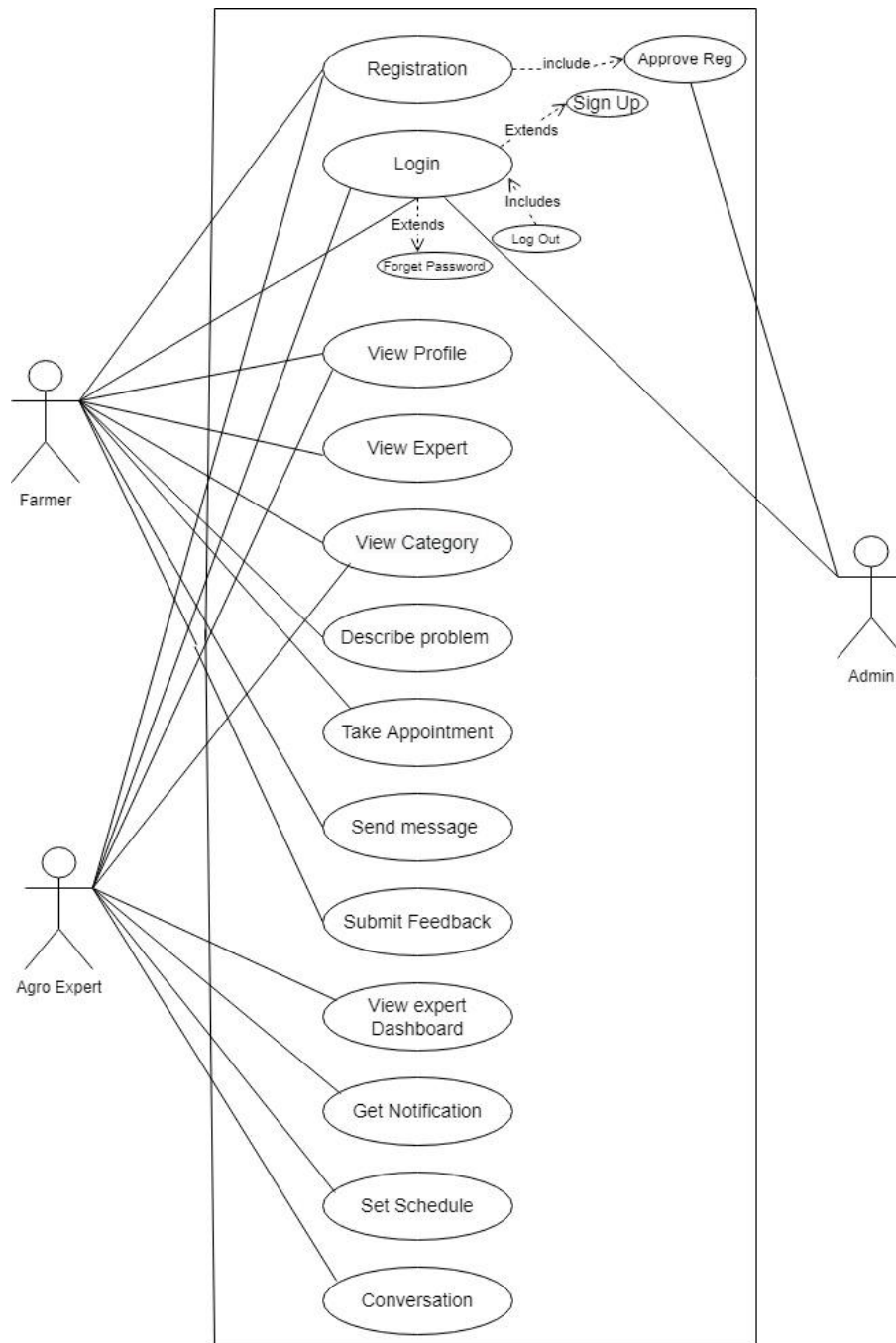
Table 16: Data Capability

Non-Functional Requirement id: NF-ID: 077	
Name: Data Capability	
Definition: System must have to manage hundreds of data	
Stakeholders: All users	

Table 17: Privacy

Non-Functional Requirement id: NF-ID: 088	
Name: Privacy	
Definition: User records and personal information always must be secure by the system	
Stakeholders: Farmer, Agriculture Specialist, Admin	

2.5 Use Case of proposed System:



Use Case

Figure 1: Use Case Diagram

2.5.1 Use-Case Description :

Table 18: Register

Use Case Name	Register
Use Case ID	UCid-1
Pre-Condition	Visit the registration page and fill-up the form with a valid and unique email id
Actors	Farmer, Agriculture Specialist
If success then the situation	Successfully register wait for admin approval and save into database
If fail then the situation	Show users error message with proper condition
Trigger	Show panel but not clickable until user approval
Description	When used will fill up all input fields (Agriculture Specialist are extra different input fields) then the user has to wait for a unit admin to approve users' registration.

Table 19: Approve Registration

Use Case Name	Approve Registration
Use Case ID	UCid-2
Pre-Condition	<ul style="list-style-type: none"> • Logged in • Have to visit User's page for approval
Actors	Admin
If success then the situation	Successfully approved users
If fail then the situation	Show error message with proper condition
Trigger	Show users list
Description	Every user must be approved after registration for login.

Table 20: Login

Use Case Name	Login
Use Case ID	UCid-3
Pre-Condition	<ul style="list-style-type: none"> • Must have to be registered user with admin approval • Visit the login page and fill-up the form with a valid email that is registered
Actors	Agriculture Specialist, Farmer, Admin
If success then the situation	Successfully login
If fail then the situation	Show users error message with proper condition
Trigger	Show panel with all section
Description	When a user's login to this system, they will see a panel page with a workable section

Table 21: View Profile

Use Case Name	View Profile
Use Case ID	UCid-4
Pre-Condition	Must have logged in
Actors	Farmer, Agriculture Specialist
If success then the situation	Farmer, Agriculture Specialist can successfully view her/his profile
If fail then the situation	Farmer, Agriculture Specialist can't see anyone details.
Trigger	Show successful profile.
Description	Whenever farmer, agriculture specialist wants, they can create or edit, add something on his/their profile.

Table 22: View Expert

Use Case Name	View Expert
Use Case ID	UCid-5
Pre-Condition	Must have logged in
Actors	Farmer
If success then the situation	After successfully login farmer can view the agriculture specialist list
If fail then situation	The farmer can't view or not find any specialist
Trigger	Show successful view expert page
Description	When farmers need to contact any agriculture specialist, they can visit the expert list.

Table 23: View Category

Use Case Name	View category
Use Case ID	UCid-6
Pre-Condition	Must have logged in
Actors	Farmer
If success then situation	After successfully login farmer can see the view category
If fail then situation	The farmer can't view or not find any category
Trigger	Show product category
Description	When farmers need, they can visit the category list

Table 24: Take Appointment

Use Case Name	Take Appointment
Use Case ID	UCid-7
Pre-Condition	Must have logged in
Actors	Farmer
If success then situation	If agriculture specialists accept then the user will get notified and save it into the database
If fail then situation	If the agriculture specialist is not active then use the r cannot get an appointment
Trigger	Show successful message
Description	Whenever agriculture specialists, can create an appointment section with active status and valid video conferencing link

Table 25: Send Message

Use Case Name	Send Message
Use Case ID	UCid-8
Pre-Condition	Must have logged in
Actors	Farmer,
If success then situation	If farmers want to communicate with specialists, they can send a message.
If fail then situation	If the specialist is not active or get any notification then the farmer cannot send a message.
Trigger	Show successful message
Description	Whenever If the specialist is not active or gets any notification then the farmer cannot send a message.

Table 26: Submit Feedback

Use Case Name	Submit Feedback
Use Case ID	UCid-9
Pre-Condition	Must have logged in
Actors	Farmer
If success then situation	If farmers want, they can give feedback
If fail then situation	Giving feedback isn't mandatory
Trigger	Show successfully submitted feedback
Description	After communicating if a farmer wants to give feedback to a specialist, they can do this.

Table 27: View Expert Dashboard

Use Case Name	View Expert Dashboard
Use Case ID	UCid-10
Pre-Condition	Must have logged in
Actors	Agriculture Specialist
If success then situation	If successfully login they can visit their dashboard
If fail then situation	Without successful login, they can't create a profile and can't see the dashboard
Trigger	Show successfully expert dashboard
Description	After registration and login agriculture specialist can see their dashboard.

Table 28: Get Notification

Use Case Name	Get Notification
Use Case ID	UCid-11
Pre-Condition	Must have logged in
Actors	Agriculture Specialist
If success then situation	If an agriculture specialist gets a notification, then he/she can understand that farmer wants to contact him/her.
If fail then situation	Nobody sends him/her an appointment or message.
Trigger	Show successfully notification.
Description	Any farmer sends a message or take an appointment to a specialist then he/she gets a notification.

Table 29: Set schedule

Use Case Name	Set schedule
Use Case ID	UCid-12
Pre-Condition	Must have logged in
Actors	Agriculture Specialist
If success then situation	If an agriculture specialist set a schedule then he/she can contact with farmer.
If fail then situation	The farmer can't communicate without a specialist schedule.
Trigger	Show successfully set schedule
Description	Taking an appointment from farmer agriculture specialist set a schedule then he/she can contact with farmer.

Table 30: Conversation

Use Case Name	Conversation
Use Case ID	UCid-13
Pre-Condition	Must have logged in
Actors	Agriculture specialist
If success then situation	If farmer send a message, then the specialist will start a conversation
If fail then situation	If farmer don't send any message, they can't start a conversation
Trigger	Show successfully start a conversation
Description	After the appointment and scheduling process, the specialist started a conversation with the farmer.

CHAPTER 03

SYSTEM DESIGN

3.1 Activity Diagram

3.1.1 Activity Diagram for Farmer

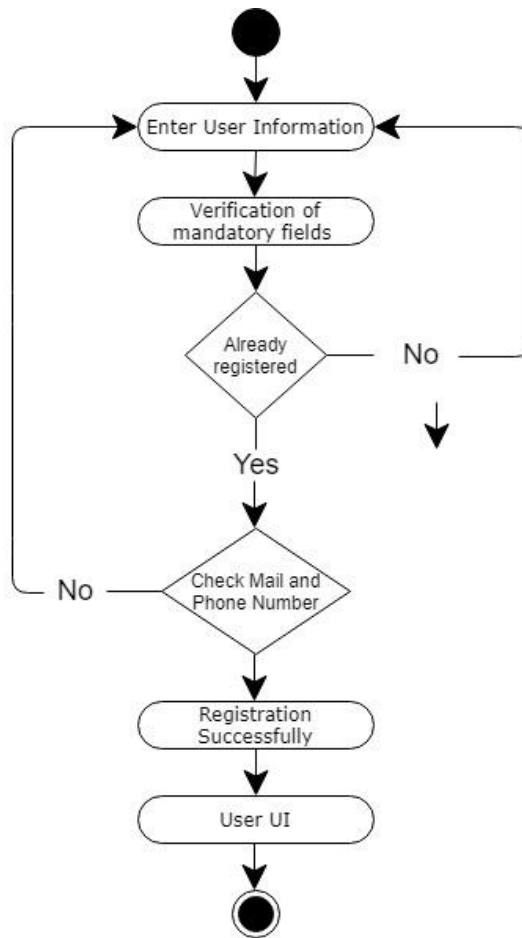


Figure 2: Activity Diagram for farmer

Description : At first users should input their information, then verify their mandatory field. If all the information are correct then will show user UI or home page and if information are not correct then user need to again input their information.

3.1.2 Activity Diagram for agriculture specialist

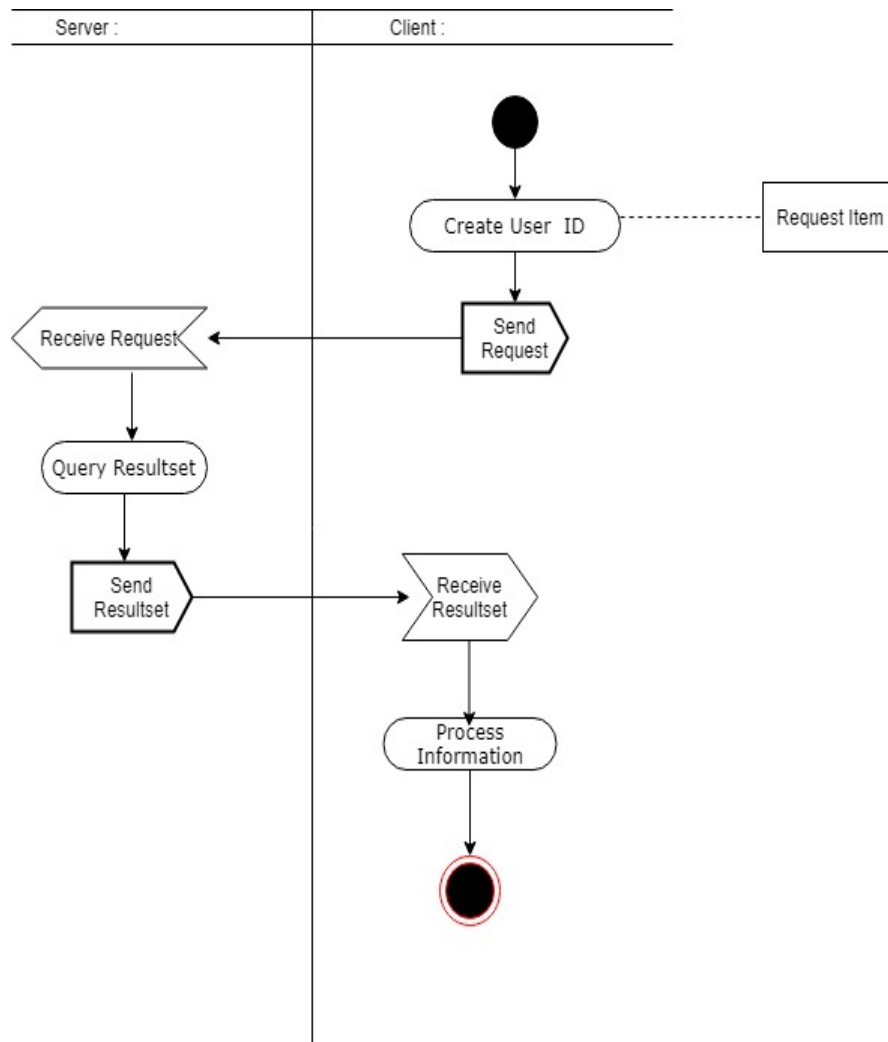


Figure 3: Activity Diagram for Agriculture Specialist

3.1.3 Activity Diagram for login

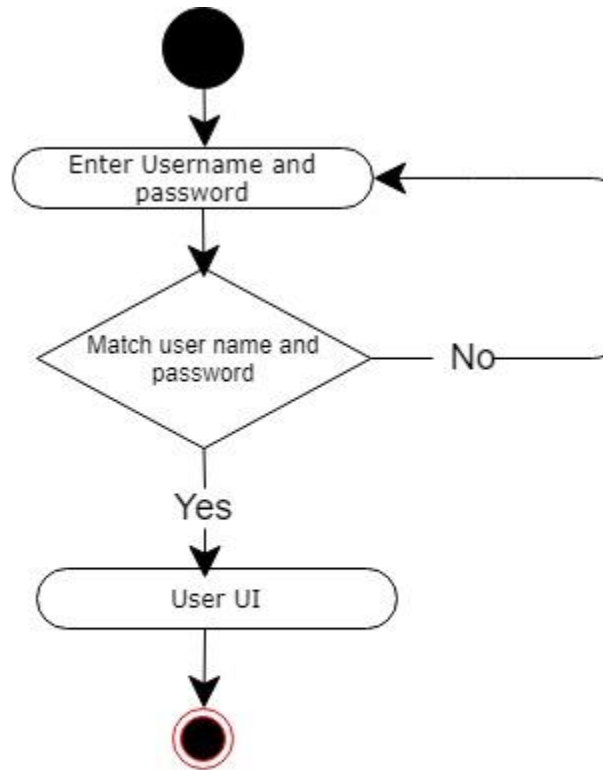


Figure 4: Activity Diagram for login

3.1.4 Activity Diagram for a set schedule

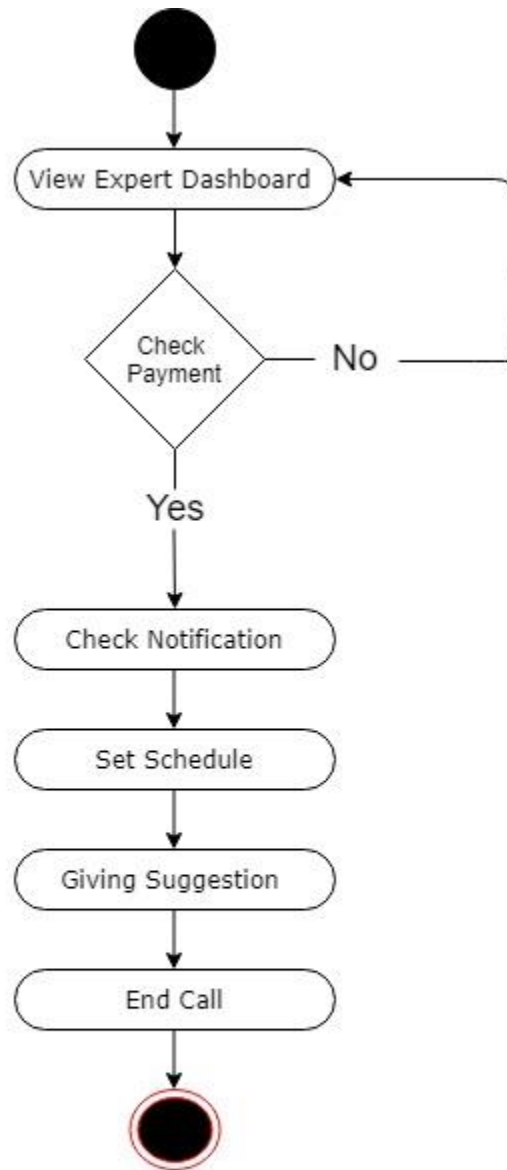


Figure 5: Activity Diagram For Set schedule

3.1.5 Activity Diagram for take appointment

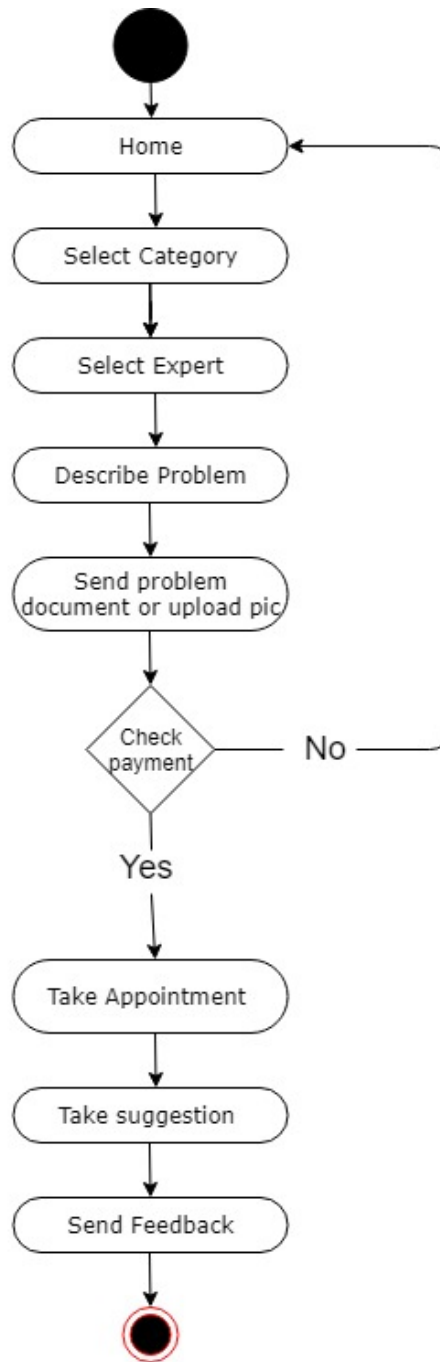


Figure 6: Activity diagram for take appointment

3.2 Class Diagram

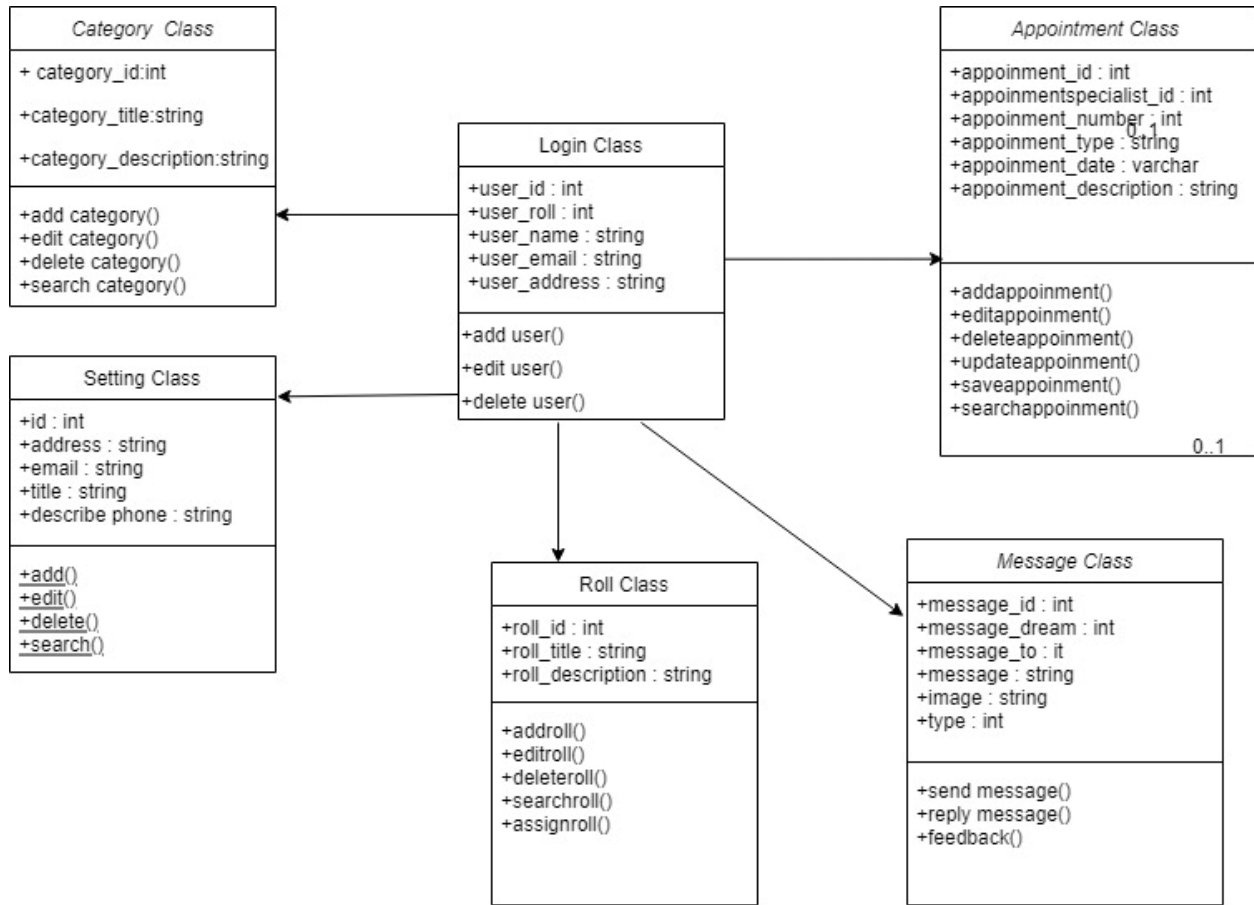


Figure 7: Class Diagram

3.3 ER Diagram

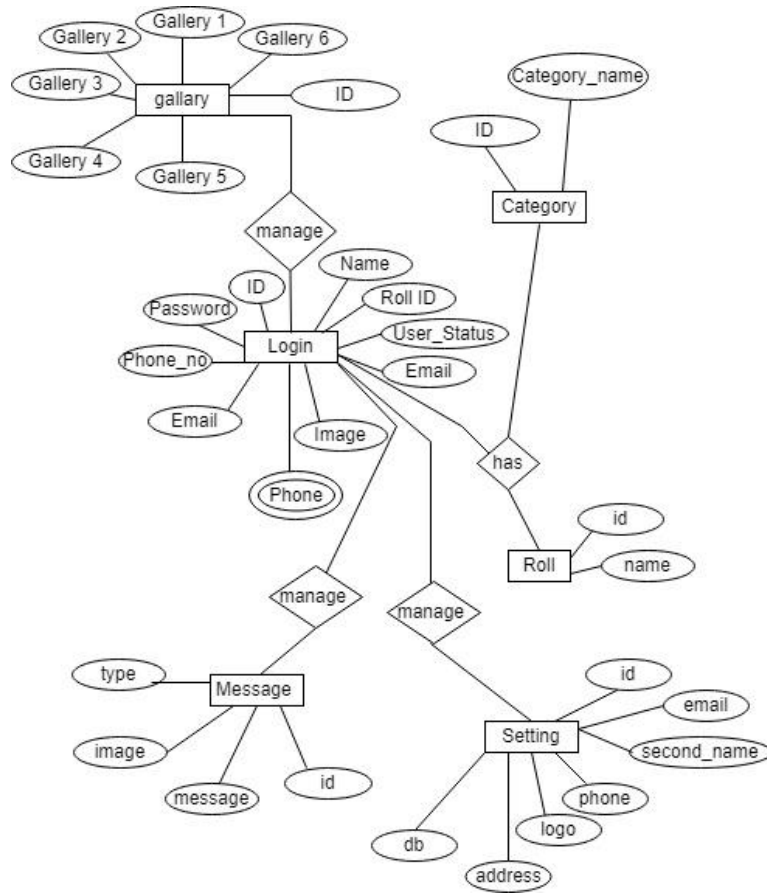


Figure 8: ER Diagram

3.4 Sequence Diagram

3.4.1 Sequence Diagram for login

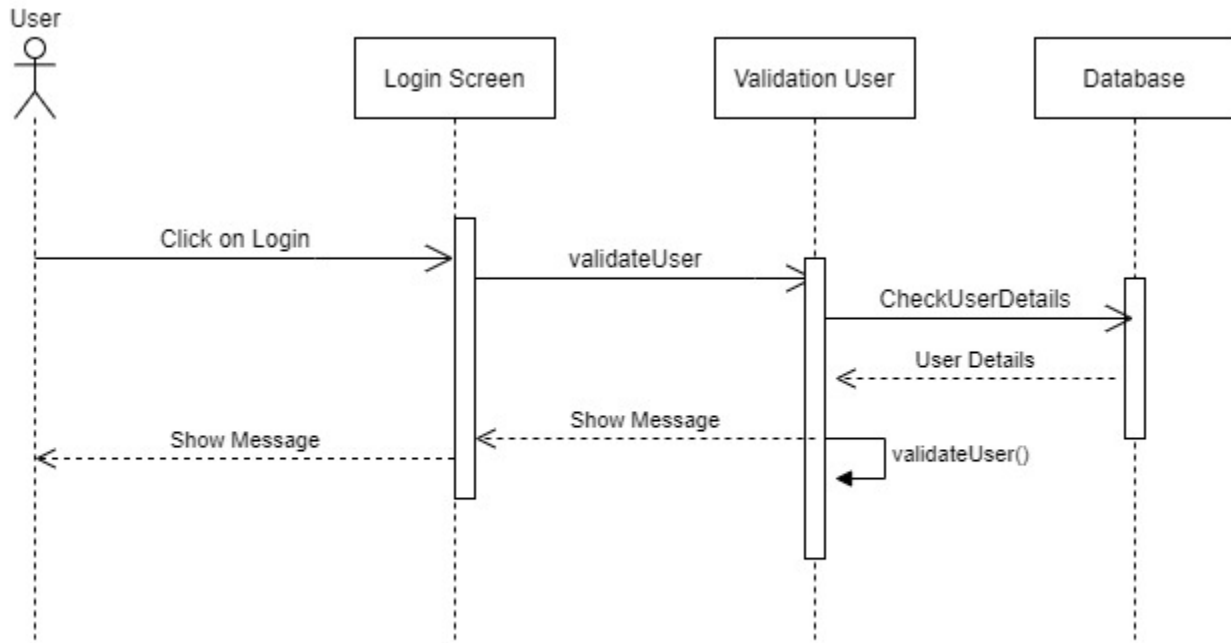


Figure 9: Sequence Diagram for login

CHAPTER 04

SYSTEM TEST AND DEVELOPMENT

Introduction:

This project is mainly a web application that is built for user facilities. This website offers a wide range of agriculture-related services. There are many different types of features in this system, as well as three different types of users. As a result, this application will require thorough testing to achieve high-quality assurance. Some form of testing will be used to test each feature.

- **Functional Testing:** By using this functional testing, functions that we used in our project works properly as we want which is based on our requirement
- **Unit Testing:** We also test our project by unit testing, we check every module of code, if we find any bug, then we fixed it and then run it again.
- **Integration Testing:** Integration testing is also used; every module or section is connected.
- **System Testing:** Our system receives a wide range of requirements that are needed for users.

Features which are tested:

Features	Priority	Definition
Registration	3	User must have to be registered first and the specialist must have to wait for admin approval
Login	2	All kinds of users like a norm, adminal user and also specialists must have to authorized first by login
Profile	2	All kinds of users have their profile
Specialist Approval	3	The specialist must have to wait for approval from the admin. If the admin thinks this specialist is real then he can approve it.

Add appointment	3	The specialist must need logging in and then he can provide an appointment for the farmer which could be google meet or zoom
Feedback	2	If farmers want, he can send feedback by observing their outcome
Dashboard	2	Admin has a dashboard where he can monitor every section of this website
Notification	1	If specialist or Farmer access special kinds functionality so they he can get notification
Set Schedule	2	A specialist can provide a schedule for an appointment or live conversation
Conversation	3	One user also can have a live conversations with another user.

Here, 1 = Less Priority, 2 = Intermediate Priority, 3 = Higher Priority

Testing Strategy:

Our first intention, based on this project, is to test Farming24. First and foremost, our project's requirements must be clear, and the functioning must be flawless. Many tests are performed on each phase. Our every functionality section, we utilized unit testing to check for errors and then double-checked the source code. Functional, system and integration testing were all used.

Test Case Table:

Table 31: Registration

Test Id-01	Test Case Name: Registration
Project: Farming24	Subsystem: N/A
Formed By: Sabina Yesmin Anika	Formed Date: 25/12/2021
Reorganized By: Sabina Yesmin Anika	Reorganized By: 25/12/2021
Short Definition: User must have to be registered first and the specialist must have to be wait for admin approval. Use need some valid info for register input field	
Pre-conditions:	
<ul style="list-style-type: none"> Visiting register page is mandatory if users wants to get our system's service 	

<ul style="list-style-type: none"> User need a valid and unique email 				
Step	Action	Response	Pass/Fail	Comment
1	All sections needed to be filled with a unique email address.	The data will be saved in the database also a success message will appear.	Pass	
2	If all fields are not filled by information	Every section need to be field message will be appear.	Fail	
Post-Condition: Users' information stored into database of the system, and specialist needed to be waited for admin approval.				

Table 32: Login

Test Id-02		Test Case Name: Login			
Project : Farming24		Subsystem: N/A			
Formed By: Sabina Yesmin Anika		Formed Date: 25/12/2021			
Reorganized By: Sabina Yesmin Anika		Reorganized By: 25/12/2021			
Short Definition: User must have to be logged in first with valid information which are previously registered					
Pre-conditions: <ul style="list-style-type: none"> Visiting login page is mandatory if users want to get our system's service User need a valid and unique with previously registered email Specialist must be permitted by system admin Suppose a data from our database, email id: 'sabina35-2406@diu.edu.bd' and password is 12345678 					
Step	Email	Password	Expected Result	Pass/Fail	Comment
1	sabina35-2406@diu.edu.bd	12345678	Logged in successfully	Pass	

			in the system		
2	sabindda35-2406@diu.edu.bd	12345678	Wrong email in field	Fail	
3	sabina35-2406@diu.edu.bd	asdfa	Wrong password in field	Fail	
4	sabindda35-24033as6@diu.edu.bd	dfaasdf	Wrong email and password	Fail	
5	Empty	Empty	Fields needed to be field	Fail	
6	Empty	12345678	Email field empty	Fail	
7	sabina35-2406@diu.edu.bd	Empty	Password field empty	Fail	
Post-Condition: Successfully login redirect user to Homepage					

Table 33: Profile

Test Id-03	Test Case Name: Profile
Project : Farming24	Subsystem: N/A
Formed By: Sabina Yesmin Anika	Formed Date: 25/12/2021
Reorganized By: Sabina Yesmin Anika	Reorganized By: 25/12/2021
Short Definition: User can view all kinds of his own information in profile	
Pre-conditions:	
<ul style="list-style-type: none"> • Must be logged in • Visiting profile page wants to manage his information 	

Step	Action	Response	Pass/Fail	Comment
1	All sections needed to be filled for update profile	The data will be saved in the database also a success message will appear.	Pass	
2	If all fields are not filled by information	Every section need to be field message will be appear.	Fail	
Post-Condition: Users' information stored into database of the system, show user updated information				

Table 34: Appointment

Test Id-04		Test Case Name: Appointment		
Project : Farming24		Subsystem: N/A		
Formed By: Sabina Yesmin Anika		Formed Date: 25/12/2021		
Reorganized By: Sabina Yesmin Anika		Reorganized By: 25/12/2021		
Short Definition: Specialist can able to provide appointment by providing video discussion link				
Pre-conditions:				
<ul style="list-style-type: none"> Specialist must need to be logged in 				
Step	Action	Response	Pass/Fail	Comment
1	All sections needed to be filled for appointment video link and status	The data will be saved in the database also a success message will appear.	Pass	
2	If all fields are not filled by information	Every section need to be field message will be appear.	Fail	

Post-Condition: Specialist provided information will be stored into database of the system.

Table 35: Notification

Test Id-05		Test Case Name: Notification		
Project : Farming24		Subsystem: N/A		
Formed By: Sabina Yesmin Anika		Formed Date: 25/12/2021		
Reorganized By: Sabina Yesmin Anika		Reorganized By: 25/12/2021		
Short Definition: User's will get notification after special functionality occurs like get appointment				
Pre-conditions:				
<ul style="list-style-type: none"> • Users must need to be logged in 				
Step	Action	Response	Pass/Fail	Comment
1	Need net connection and must be visit into notification section	Successfully show user a notification	Pass	
2	If users net connection off	User cannot get any notification.	Fail	
Post-Condition: Users will find important notification by viewing notification section.				

Table 36: Feedback

Test Id-06		Test Case Name: Feedback		
Project: Farming24		Subsystem: N/A		
Formed By: Sabina Yesmin Anika		Formed Date: 25/12/2021		
Reorganized By: Sabina Yesmin Anika		Reorganized By: 25/12/2021		
Short Definition: Users can send feedback by observing their outcome of harvest.				
Pre-conditions:				
<ul style="list-style-type: none"> • Users must need to be logged in 				

Step	Action	Response	Pass/Fail	Comment
1	All sections needed to be filled for sending feedback	The data will be saved in the database also a success message will appear.	Pass	
2	If all fields are not filled by information	Every section needs to be field message will be appeared.	Fail	
Post-Condition: Users will find important notification by viewing notification section.				

Table 37: Dashboard

Test Id-07		Test Case Name: Dashboard		
Project: Farming24		Subsystem: N/A		
Formed By: Sabina Yesmin Anika		Formed Date: 25/12/2021		
Reorganized By: Sabina Yesmin Anika		Reorganized By: 25/12/2021		
Short Definition: Admin can see all kinds or activity by this dashboard.				
Pre-conditions:				
<ul style="list-style-type: none"> Users must need to be logged in 				
Step	Action	Response	Pass/Fail	Comment
1	Need net connection	Can see all kinds of activity	Pass	
2	Net connection off	Need net connection	Fail	
Post-Condition: Admin will monitoring every section by dashboard.				

Table 38: Schedule

Test Id-07		Test Case Name: Schedule		
Project : Farming24		Subsystem: N/A		
Formed By: Sabina Yesmin Anika		Formed Date: 25/12/2021		
Reorganized By: Sabina Yesmin Anika		Reorganized By: 25/12/2021		
Short Definition: Specialist can provide a schedule for appointment or live conversation				
Pre-conditions:				
<ul style="list-style-type: none"> Specialist must need to be logged in 				
Step	Action	Response	Pass/Fail	Comment
1	All sections needed to be filled for provide scheduling	The data will be saved in the database also a success message will appear.	Pass	
2	If all fields are not filled by information	Every section need to be field message will be appear.	Fail	
Post-Condition: After providing schedule for farmers, farmers will get notification for schedule				

Table 39: Conversation

Test Id-08		Test Case Name: Live conversatioin		
Project : Farming24		Subsystem: N/A		
Formed By: Sabina Yesmin Anika		Formed Date: 25/12/2021		
Reorganized By: Sabina Yesmin Anika		Reorganized By: 25/12/2021		
Short Definition: One user also can have conversation with another user.				
Pre-conditions:				
<ul style="list-style-type: none"> Users must need to be logged in 				
Step	Action	Response	Pass/Fail	Comment

1	All sections needed to be filled and also need net connection	Live chat session will start successfully.	Pass	
2	If all fields are not filled and net off	User will get server error	Fail	
Post-Condition: Users can communicate with another users like messenger chat system.				

Tools and Technology:

We used a variety of tools to create this web application. The following are some of the tools and technology available:

Frontend: Html5 is our main skeleton of project and we also used CSS and its famous framework which is bootstrap, we also used JavaScript, jQuery

Backend: Laravel 8

Framework: Laravel 8

Database: Apache PhpMyAdmin server

Tools: visual studio Code and Xampp

Development of Front-end:

There are two components: a frontend and a backend. The front-end is a software component that allows users to interact visually with a display. As a result, we may conclude that a project's user appeal is quite important. That is why we require a user-friendly interface that will attract and retain users. Our system is built using Bootstrap, CSS, JavaScript, and jQuery. The following are the descriptions:

- **HTML5:** HTML is said to as the "bone" of a web system. Our project's structure was created using HTML5. Our project's basic foundation is HTML.
- **Bootstrap and CSS:** For the most part, we used bootstrap, a well-known CSS framework. We also used bespoke CSS for our project.
- **jQuery and JavaScript:** We used these to make our functionality more engaging.
- **Sweet alert:** We utilize sweet alert to display alerts. When a user completes a task, he will be able to see this alert.

Implementation of Back-end Design:

We used the Laravel framework, which is a backed framework, for this project. We used Laravel version 8, which is now in use all across the world. Version 8.0.1 of PHP was also utilized. We also use the Xamp software to save our information in a database. Laravel is a backend framework that ensures the highest level of security for our system. The ability to read, write, delete, and update data from a database is extremely useful when using the Laravel as backend development.

CHAPTER 05

USER MANUAL

5.1 Introduction

There are three types of users in our system. All user must need instruction for using our system. This is very important part of an application. Users are Admin, Farmer, Agriculture Specialist. All user's manual is given below-instructions



Figure 10: Home Page

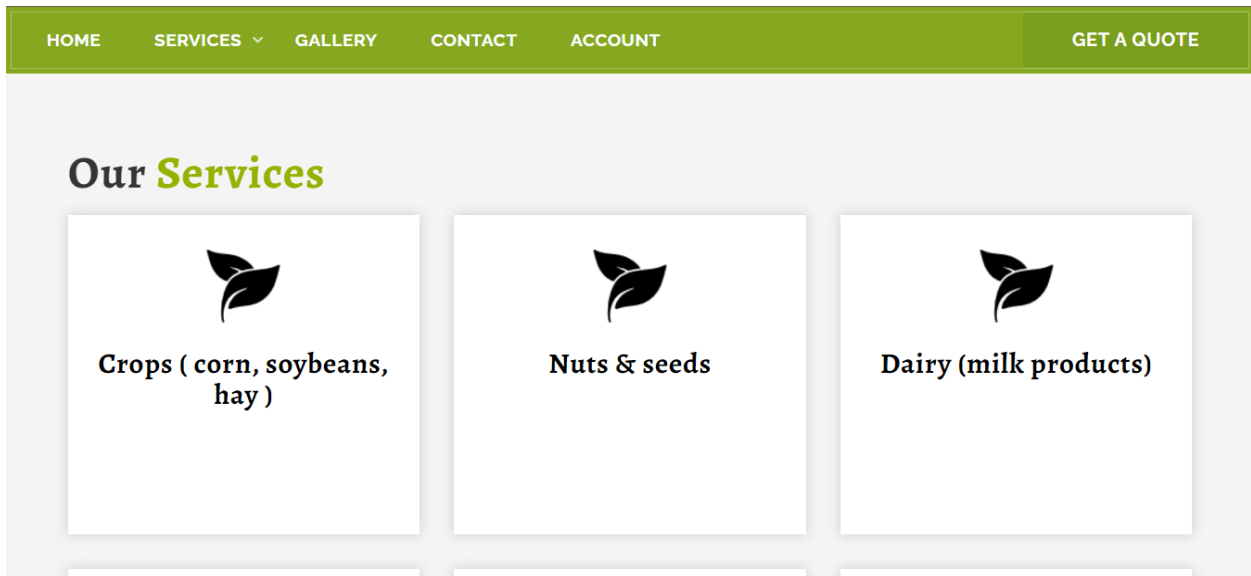


Figure 11: Category

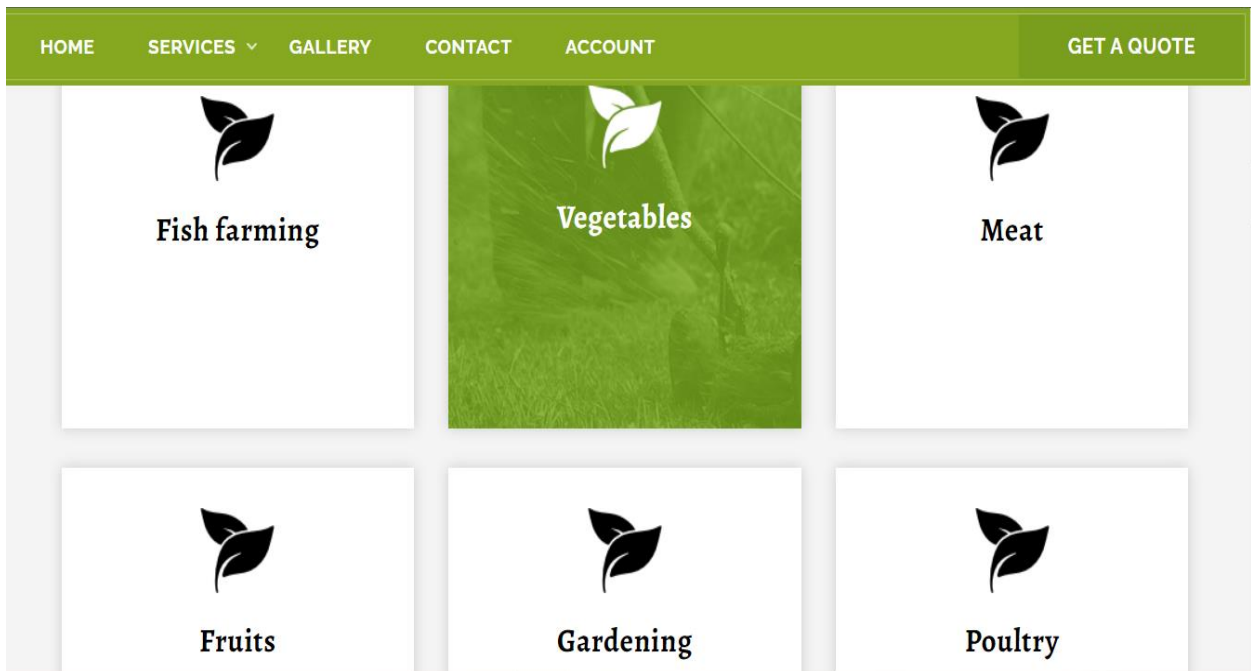


Figure 12: Category

HOME SERVICES ▾ GALLERY CONTACT ACCOUNT GET A QUOTE

Create Account

Full Name

E-Mail

Account Type

NID

Password


Password Confirm

[Registaer](#)


Figure 13: Registration

HOME SERVICES ▾ GALLERY CONTACT ACCOUNT GET A QUOTE

Service Specialist




Anika Talukder (Crops (corn



Sandip Sarker (Nuts & seeds)

[PROFILE DETAILS](#) [MESSAGE](#)



shutterstock.com · 2097100663

Sandip Sarker (Nuts & seeds)

[PROFILE DETAILS](#) [MESSAGE](#)

Figure 14: Specialist

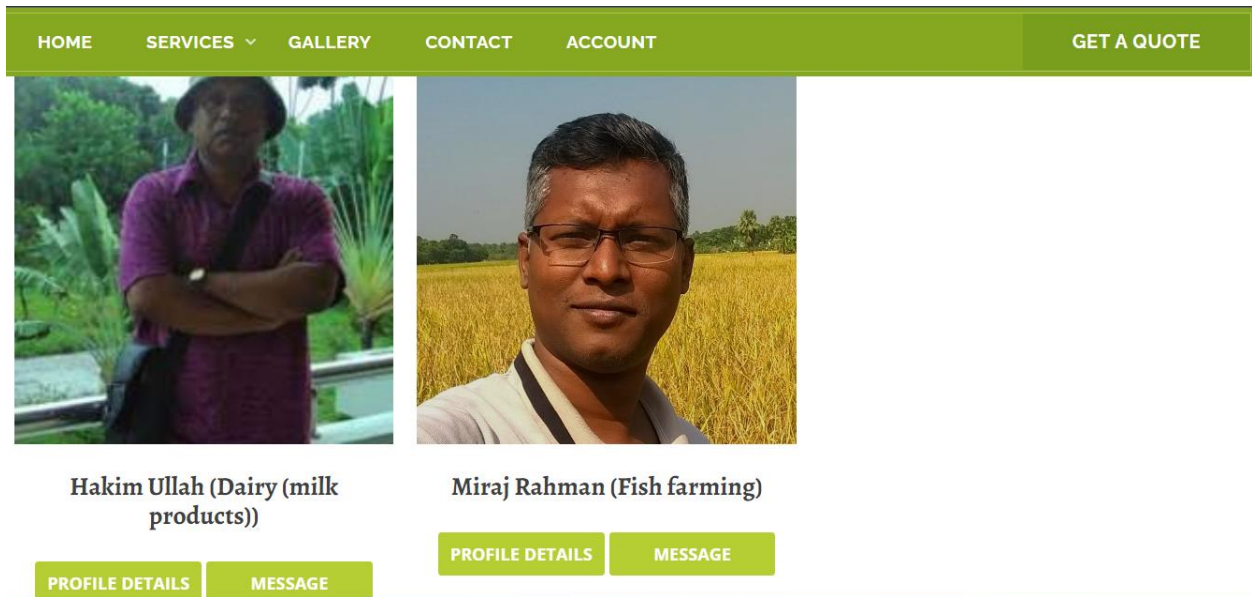


Figure 15: specialist

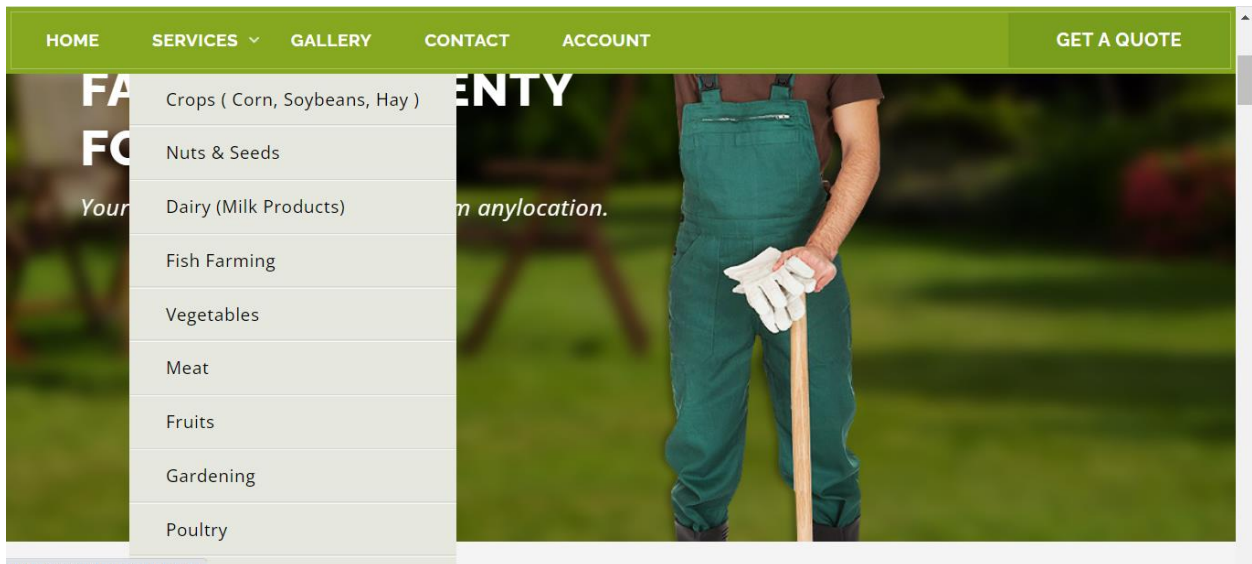


Figure 16: Category

Create Account

Full Name

E-Mail

Account Type

NID

Password

Password Confirm

[Registaer](#)

Figure 17: Farmer registration

PICK

[Sign Out](#)

Farmer Specialist Account Create Successfully. Home / Dashboard
Welcome to Farmer Specialist panel

Panding for andin checked you account please wait !! and try again .
Welcome to Farmer Specialist panel

[Sign Out](#)

Figure 18: Farmer approval request page

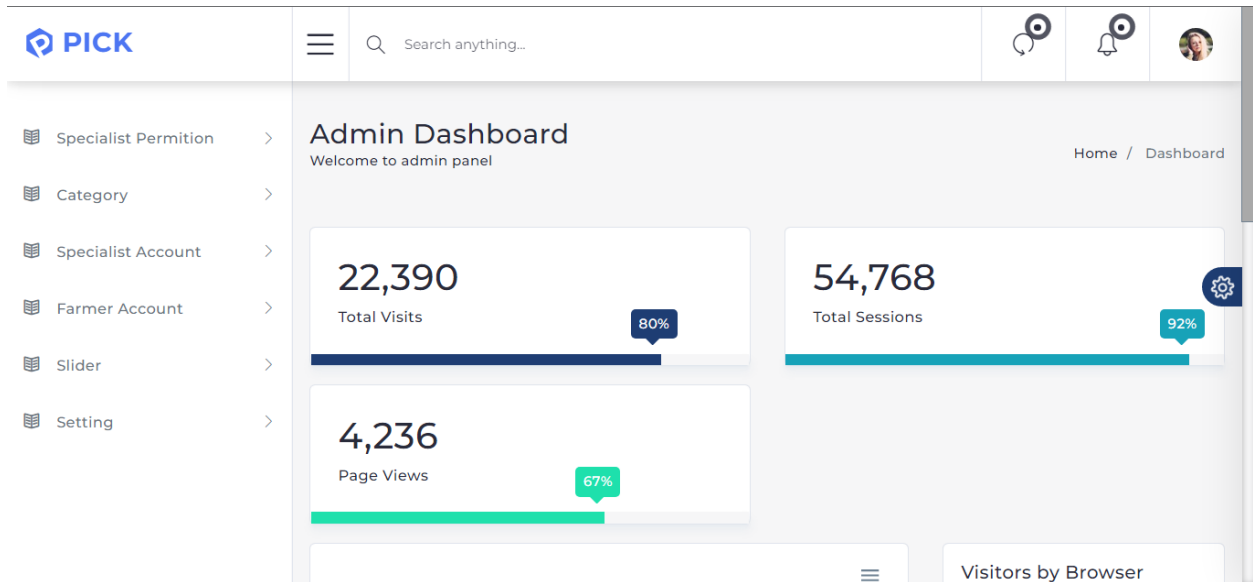


Figure 19: Admin Dash board

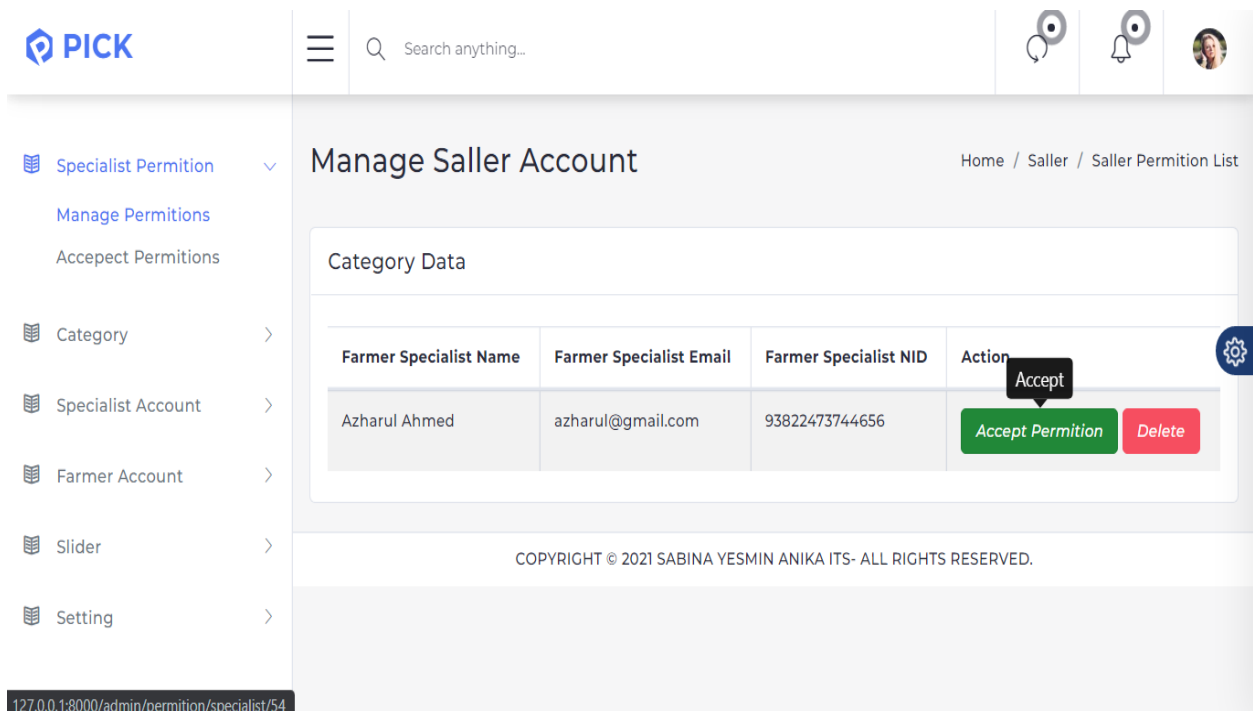


Figure 20: Manage specialist account

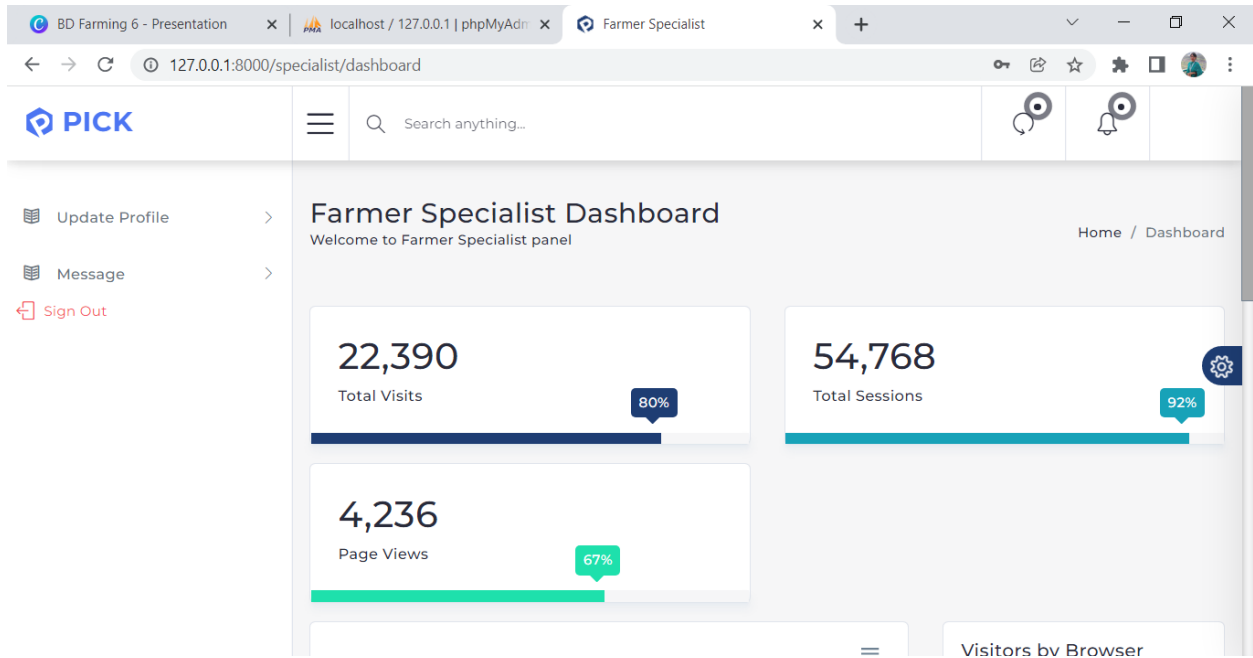


Figure 21: Specialist Dashboard

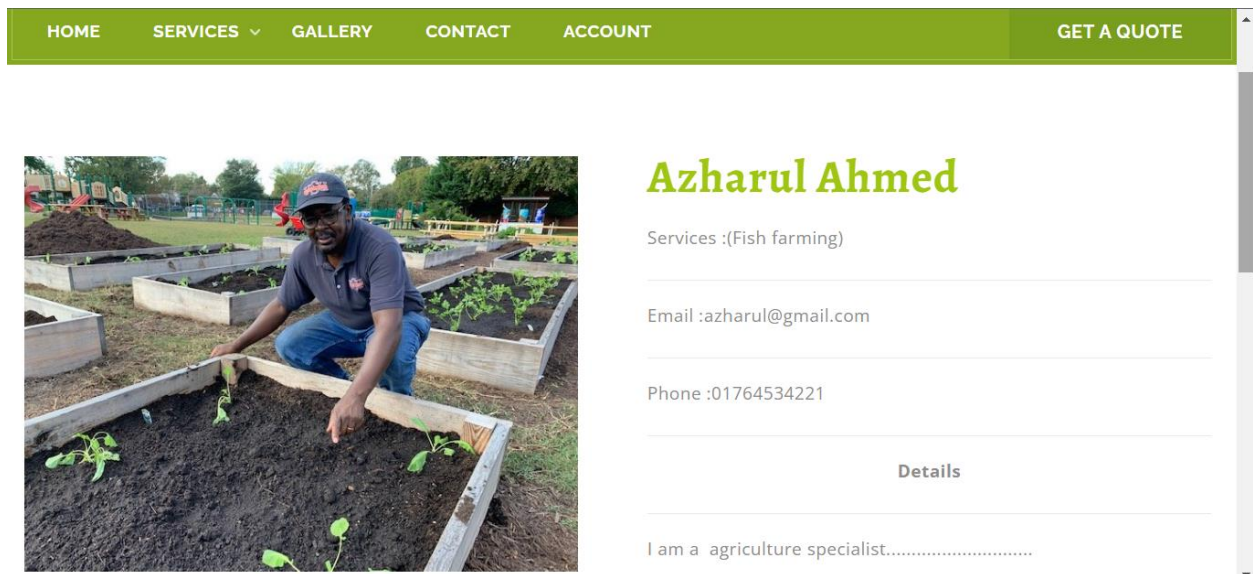


Figure 22: Specialist Profile

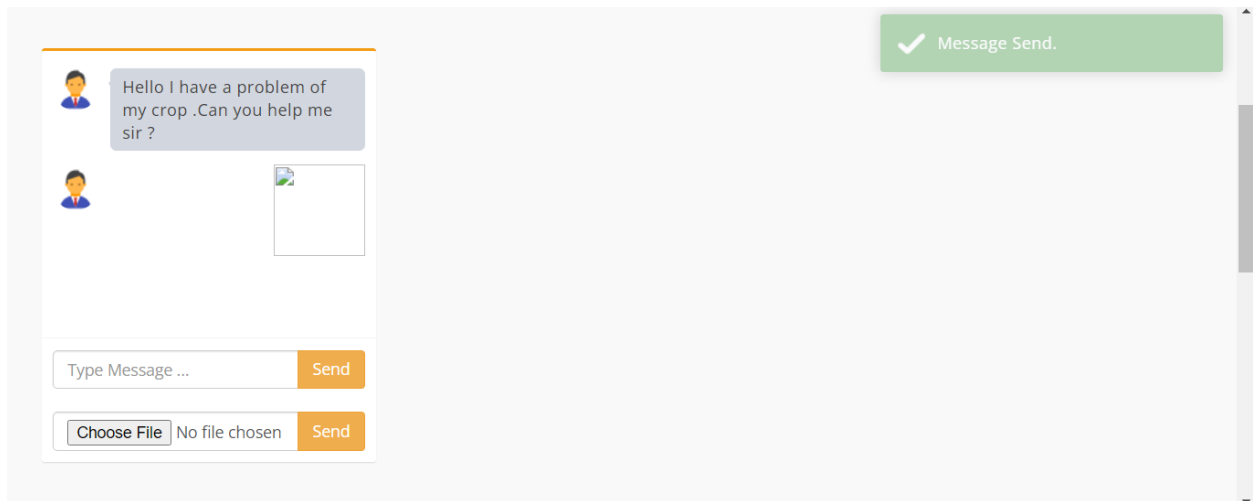


Figure 23: Message option

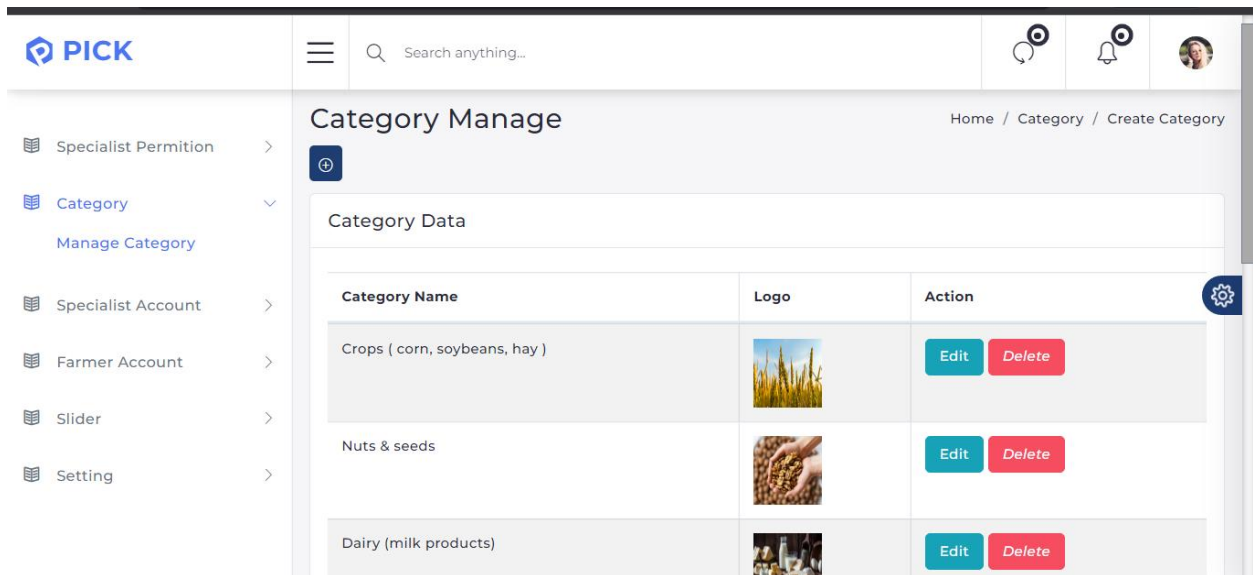


Figure 24: Category manage

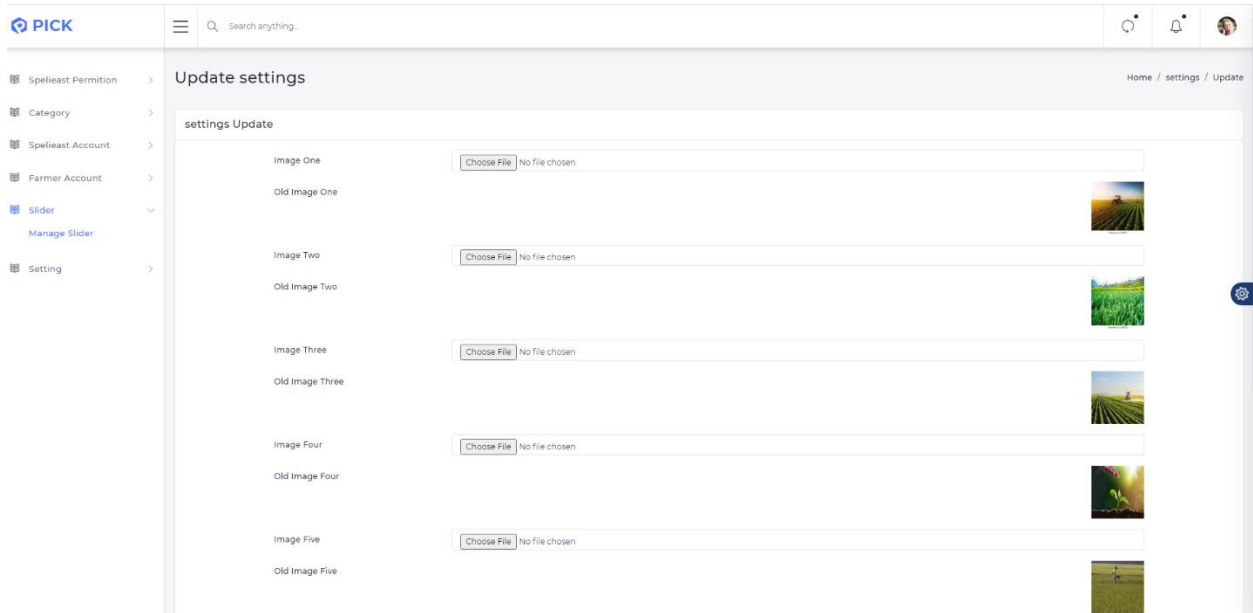


Figure 25: Gallery Setting

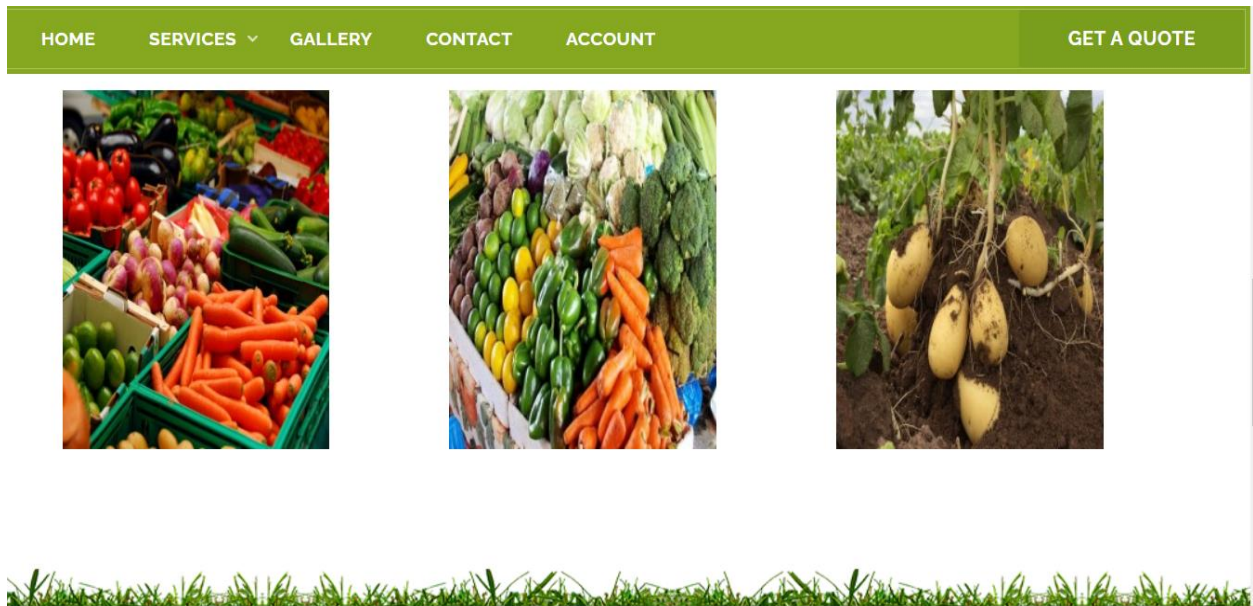


Figure 26: Gallery

CHAPTER 06:

CONCLUSION

6.1 Conclusion:

According to this project, information are assembled from essential and auxiliary information from a assortment of websites, in this manner it can be contended that this site it built on an agriculture site in arrange to donate customers with an realness. Users can find authentic information from this website whenever they want. Main benefits of this website is, both the agriculturist and the agrarian specialist got to enroll and log in to the site by giving certain data. Ranchers will at that point be able to message rural counsel or jigsaw with item pictures or recordings to unravel any issue with agrarian items or rural work. Then when the rancher sends a message to the agrarian specialist, the rural specialist will get a notice, due to which he will get it that any agriculturist is inquiring for his help. Internet is gradually getting to be accessible in rustic zones of Bangladesh. Due to which agriculturists these days have begun depending on the web for their agrarian work exhortation. Since it decreases both their time and taken a toll and they can spend more time on the field.

6.2 Reference:

<https://eprints.usq.edu.au/23523/>

<https://link.springer.com/article/10.1007/s10499-007-9100-7>

<https://en.wikipedia.org/wiki/Agriculture>

Plagiarism Report:

1/24/22, 1:55 PM Turnitin

Turnitin Originality Report

Processed on: 24-Jan-2022 13:53 +06
ID: 1746968548
Word Count: 6472
Submitted: 1

181-35-2406 By Sabina Yesmin Anika

Similarity Index	Similarity by Source
11%	Internet Sources: 8% Publications: 0% Student Papers: 8%