Digital Farming: A digital platform for farmer's and experts.

BY

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of
Bachelor of Science in Computer Science and Engineering

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APPROVAL

This Project titled **"Digital Farming"**, submitted by Sadia Akter Rupa (142-15-3674) ,Surovey Balo (142-15-4101) and Arifin Nahar(142-15-3595) to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering (BSc) and approved as to its style and contents. The presentation has been held on 8th April 2018.

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DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Ahmed Al Marouf, Lecturer, and Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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ABSTRACT

In today's world, many people are depend on farming. And we also know that the maximum population is depend on farming sector. For this, we thought that we should build something for farmer that has practical use to the farmers, and it will help them in difficult situations. Our project name is "Digital Farming", by the name of our project we can easily assume that this project is for farming and prevention of farmer's difficulties. And this is the main purpose of our project. A digital farming website for farmer is definitely going to help farmer in critical situation. One of the major feature of our website is 'Price Hike', by this feature farmer can see the price of any crops, can easily avoid those third party information. Farmer can also know the reason of price hike. We used html, CSS, JS, bootstrap for front-end design and PHP, LARAVEL framework for back-end design. This website is very user friendly. After finishing all the task and test process, this website proved to be working effectively.

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CHAPTER 1

Introduction

1.1 Introduction

Bangladesh is a developing country. In Bangladesh many people are depend on farming. And we also know that the maximum population is depend on farming sector. But as a result of developing country, our country is not well digitalized. For example, if we say about our farmer they are working very hard to grow crops. But the system of growing crops is totally manual. For this reason, farmers are suffer a lot due to lack of the digitalization of farming sector. And we also know that, our honorable Prime Minister's dream is to make a "Digital Bangladesh". Our farming condition is not very good we already know. To make our farming condition better and to reduce the hard work of our farmers we proposed a system "Digital Farming" that may be reduce suffer of our poor farmers. If we say about others developed country like U.S.A, England, Thailand, Malaysia etc. they are using digital technology on farming so they can increase their production over farming sectors. Even our neighbor country India, they are using digital technology on farming sector to improve their agriculture sector and they recently improved their farming condition a lot with the help of science and technology. But in Bangladesh where a large number of people depends on farming, but there are no contribution of science and technology on farming. If such way is continuing then the farming sectors will be finished in our country. We know every year we import the raw materials form the foreign country and the food, oil and many others things from foreign country. The Govt. is make a huge investment to do that. But if our farming sectors is established then we don't need to import from others country. If today our farming sector was good then we can make more and more productions in our country and that helped is to cover huge loss every year from import things. If we can use the new things then this job can be done within some days. But our technology is not very good to do that. So we have to use new technology as soon as possible to make farming sectors well established. For this purpose we proposed "Digital farming".

1.2 Motivation of work

Bangladesh Television (BTV) was telecasted a program that named was "Mati O Manus". This program was telecast the management of our farming sectors in Bangladesh. That time "mati o manus" was only one program that told about the farming sectors in Bangladesh, where they telecast the problem and solution about the farming of Bangladesh. The farmers in Bangladesh was got much benefit from that program. They actually got various problem and their solution form this program. Then after few years many satellite channel telecast program about farming of Bangladesh from the root of "mati o manus". From this various program "Hridoye Mati O Manus" by Channel i, "Shaymol Bangla" by Banglavision, "Matir Shuvas" Ntv Bangla etc. were telecasted. Now Bangladesh television (BTV) telecast a new program that is known by "Banglar Krishi", from where the farmers of Bangladesh are get benefited a lot. A call center named "Banglar Krishi Call Center" is founded by the Government of Bangladesh. This call center open at 9.00 am and close at 5.00 pm and they manage most of the problem of farmers and provide the solution. From anywhere in Bangladesh anyone can call into this call center. They are always worked for the help of farmers but there is a problem that is, this call center is open for a limited time each day. Bangladesh Government take many useful steps for the farmers and the farming and want to work for future. Because farming is the only main source by which we can earn from abroad. Without farming the economy of Bangladesh cannot be established. So for that, our website or system is always work for running the economy of Bangladesh. We are actually inspired from those program which we mentioned above. With the flow of those inspiration we actually created this website or system to reduce the problem of the farmers of Bangladesh. We hope "Digital Farming" will play an important role to reduce the problem of Bangladeshi farmers. Our website will working for fulfill the goal of the development of farming sectors of our country by using information and technology and it also work for the fast spread of modern farming and to reach the farming information to the people who are work with farming with an easiest way.

1.3 Objectives:

- It can be a large barrier to the farmers to get the actual price with interest of growing crops or vegetable.
- It can reduce the traditional problem of Bangladeshi farmers.
- Digital farming is such a concept that works as the great helping hand for the poor farmer of Bangladesh.
- Our project goal is to provide the accurate price when they buy or sell.
- Weather condition is provided from forecast7.com.
- Also the advice to grow more crops is also provided.
- Only Register user will get all the service of this website.
- We add a transport service for reducing farmers suffering to transform product anywhere in Bangladesh.

1.4 Expected Outcome

The farmers of Bangladesh spend their most of the time for farming. At the time, when farmers should paid actual price, then they don't get the actual money for their hard working. Our website is able to provide the actual price to the farmers. In this website the budget to be shown on Live Price Board which is approved by The Government of Bangladesh. For that reason, farmers are able to get the right price for his duty. Another problem of our farmer is the change of landing crops. The crops which is produced by farmers hard working is handover to the third party which is known as syndicate. When crops are handover to village to village, state to state, or municipalities to municipalities then the price of crops is increase with the kilometer. And this syndicate are sell that crops with a high rate without hard working which is produced by the farmer hard working. Our website is for those farmers, who are not able to sell their crops directly from one place to another. By using this website one farmer can able to sell his crops at market with easiest way. Some agricultural experts are always serve the farmer for his problem. This experts are dedicated to help the farmers always. This website is a user friendly website where anyone can share his experience about agriculture problem with solution or without solution. From this website farmers are able to get weather update always. Which is helped to more crops correctly. And he able to use medicine to his crops with the updates of the weather. He able to protect his crops from

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the natural disaster. So he can get rid of the hamper of crops. Agriculture plays an important role and it hold a large range of our economy. When farmers able to grow crops with a healthy mind then huge successful can be made for our economy. Which is help our country to go forward with successful way. In Digital Bangladesh "Digital Farming" is must needed and one day Bangladesh will be a developed country from developing county.

1.5 Report Layout

Chapter 1: Introduction

In this chapter we have discussed about the introduction, motivation, objectives and expected outcome of the project. Later followed by the report layout.

Chapter 2: Background

We discuss about the background circumstances of our project. We also talk about the related works, comparison to other candidate systems, the scope of the problem and challenges of the project.

Chapter 3: Requirement Specification

This chapter is all about the requirements like business process modeling, the requirement collection and analysis, the use case model of the project and their description, the logical data model and the design requirements.

Chapter 4: Design Specification

In this chapter all the designs of the project. Front-end design, back-end design, interaction design and UX and the implementation requirements

Chapter 5: Implementation and Testing

This chapter contains the implementation of database, front-end designs, interactions, test implementation and the test results of the project.

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Chapter 6: Conclusion and Future Scope

We discussed about the conclusion and the scope for further developments which pretty much derive about the project.

CHAPTER 2

Background

2.1 Introduction

Our project name is "Digital Farming". This project will be very good environment for a farmer. It's a web based project. We use PHP, HTML, CSS and JS to make this project and also use MVC pattern for framework. This website is preferable for any operating system. Farmer's will like to use this website for their professional benefit. To develop Bangladesh's economic condition and give farmer a step ahead we have created digital farming website with all advantages and facilities. In this website all facilities are available for helping farmers. Here will be available many experts to solve farmer's problem. They will give Proper solution to farmer which will be very helpful for farmers. In this website a farmer can also help other farmer if they know the solution that problem by comment on that farmer's problem post. Farmer will ask any kind of question about farming to expert any time. Farmer can also know live price of any crops which is given by Bangladesh government from this website. If they want they can use our transport facility. In this website transport facilities are available for farmers. If farmer want then they can use transport facility for marketing their crops which will be very beneficial for farmers. Farmer will also check weather updates from this website which will provide from darksky.net. If farmer or expert face any problem from this website they can contact with admin of this website any time. This service will be available for 24 hours. All the facilities is available for those farmers whose have an account on Digital farming website.

2.2 Related Works

Some kind of organization is already working for farmers by web service. They helped people with a rich functionality and they are not for untrained people. In this website a farmer can also help other farmer if they know the solution that problem by comment on that farmer's problem post. Farmer will ask any kind of question about farming to expert any time. Farmer can also know live price of any crops which is given by Bangladesh government from this website. If they want they can use our transport facility. In this website transport facilities are available for farmers. If

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farmer want then they can use transport facility for marketing their crops which will be very beneficial for farmers.

2.3 Comparative Studies

Comparative Studies between existing application and our project:

In other organization there is many facilities in this farming sector but we have different one. We use a live problem session which is worked for directly farmers to advisor. Below we have some information that will show the difference:

Table 2.1 Comparative Studies

Company name	Facility	Limitation
Moa.gov.bd **(Ministry of Agriculture, Peoples Republic of Bangladesh)**	• User can be able to know about current equipment of farming • User can be able to know about crops.	• They do not have any asking problem panel to solve any problem. • They have a feature of asking problem, but that is by phone call and the email system which is more complex to user who do not have any knowledge.
Dae.gov.bd **(Department of** **Agricultural Extension,**	• User can be able to know about the law, rules and regulation. • User can be able to know about the notice.	• They do not have any asking problem panel to solve any problem. • They do not have any transport system including with their system.

Government of the Pepole's)		
Digital farming (**A Digital Platform for Farmer's and Expert's**)	- User can be able to know the live price in a chart. - User can be able to order for transport system. - User can be able to asking question directly to the advisor. - User can be able to share something that is good for other people. - People can be able to check the current weather for weather forecasting.	- Main challenges is to train our farmers to use this website comfortable. - To make this website user friendly for farmer.

2.4 Scope of the Problem

There is a little bit problem with operating the system. Because most of the farmers are not well trained for this site. The user process, the problem asking process, posting process may be a fact to user who has not any knowledge of this website or the system. So we decided to help them with our admin who is always will work for our site. The login process and also the registration process. If farmers are not able to do the process of asking question then our admin will help them for better response. There will be a helpline to provide 24 hours advisement to farmers. This helpline is for those people who is not totally able to general process.

2.5 Challenges

- ✓ Main challenge is to trained people and
- ✓ Make awareness people to operate it. It is difficult but it is possible.

CHAPTER 3

Requirement Specification

3.1 Business Process Modeling

Actually business process modeling is a technique which is used for representing the process of a system. And the current process may be improved, analyzed and automated. In here we have defined our business model using the Data Flow Diagram. Data Flow Diagram describes how the data is processed in our system. In the following figure we draw a level-1 Data Flow Diagram for our system. Figure 3.1[6] shows the Data flow diagram of the system.
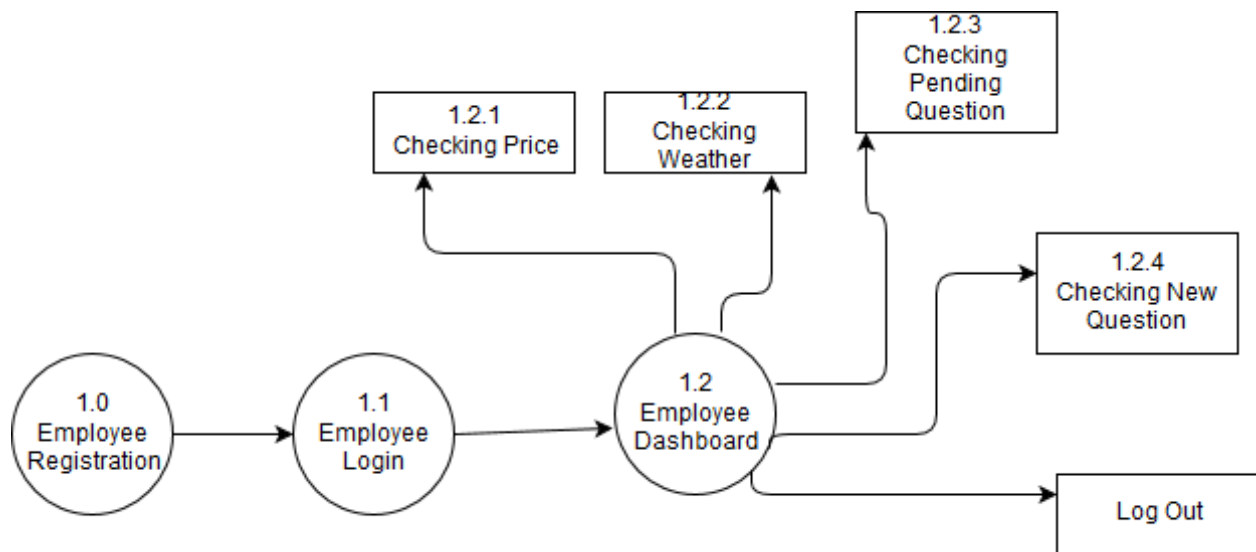
Figure 3.1: Business Process Model For Employee
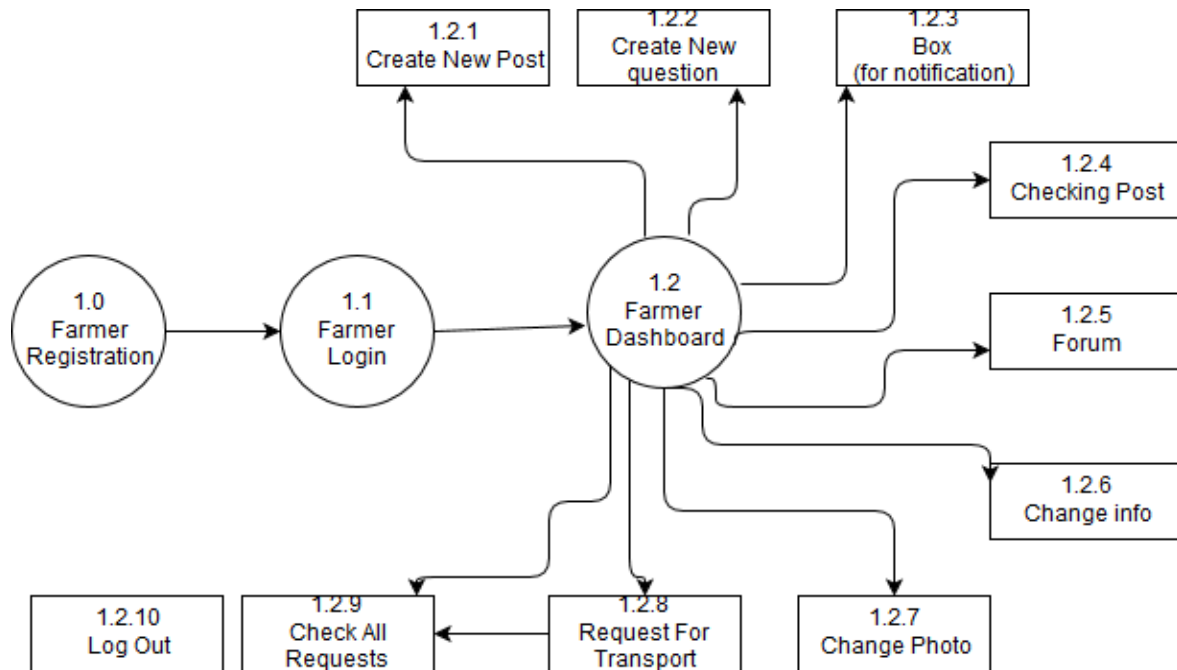
Figure 3.1: Business Process Model For Farmer

Waterfall Model

The Waterfall model is the first process model in which we can see the linier sequential life cycle which is shown in Figure 3.2. [6] Is a sequential software development process, in which progress is seen as flowing to downwards and it is less iterative? By considering the phase of Conception, Initiation, Analysis, Design, Construction, Testing and Maintenance.
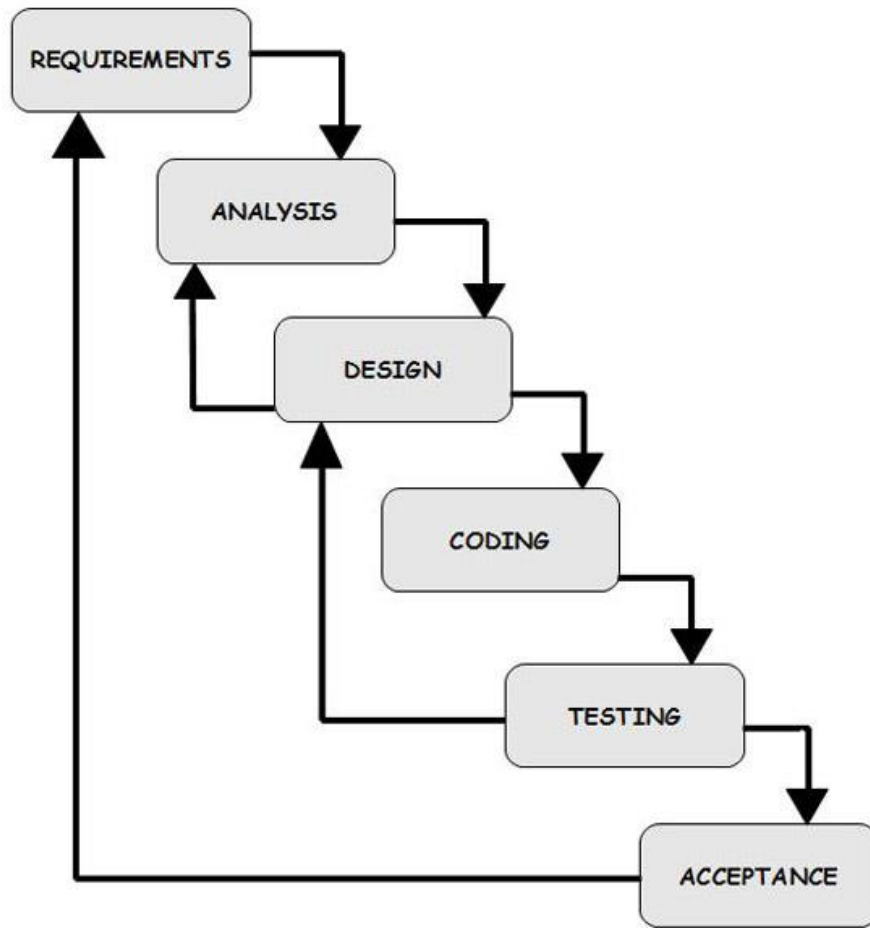
Figure 3.2: Waterfall Model [6]

3.2 Requirement Collection and Analysis

Requirement collection and analysis is one of the very essential conditions for any application development process. In application deployment, there are two types of requirements needed, one is the functional requirement and the other is nonfunctional requirement. Functional requirements are the activities that's the application software can easily perform. Nonfunctional requirements define the personality of the application, which results the application that is how much efficient, performance issues of the application and many more.

3.2.1 Functional Requirement

- Farmer Registration
- Farmer Login
- Farmer Dashboard
- Submit problem
- Box for checking
- Forum
- Check own posts
- Create new posts
- Change personal image
- Request for a transport
- Check all the transport request
- Weather
- Live price

3.2.2 Non-functional Requirement

Non-functional requirements in our application are help to optimize performance, memory consuming, being more efficient; smoother operation, and load on quickly as possible to our application. Application UI should be user friendly and gorgeous for excellent user experience.

3.3 Use Case Modeling and Description

Figure 3.3 shows the Use Case Modelling.

A use case has these characteristics:

- Use to organize functional requirements.
- Modelling the goals of the system/actor interactions.
- Record path from trigger event to goals.
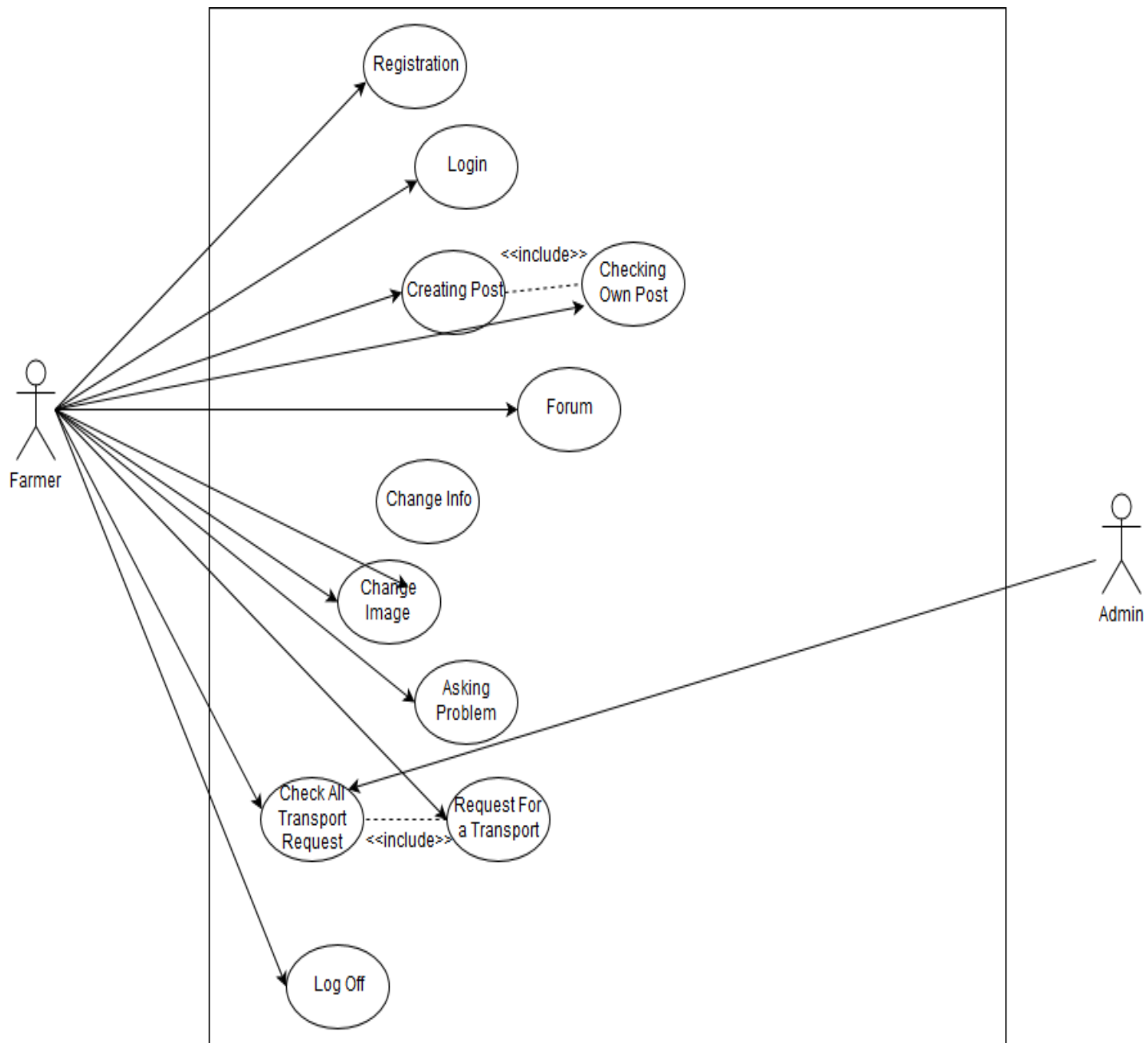
Figure 3.3: Use Case Diagram for farmer [6]
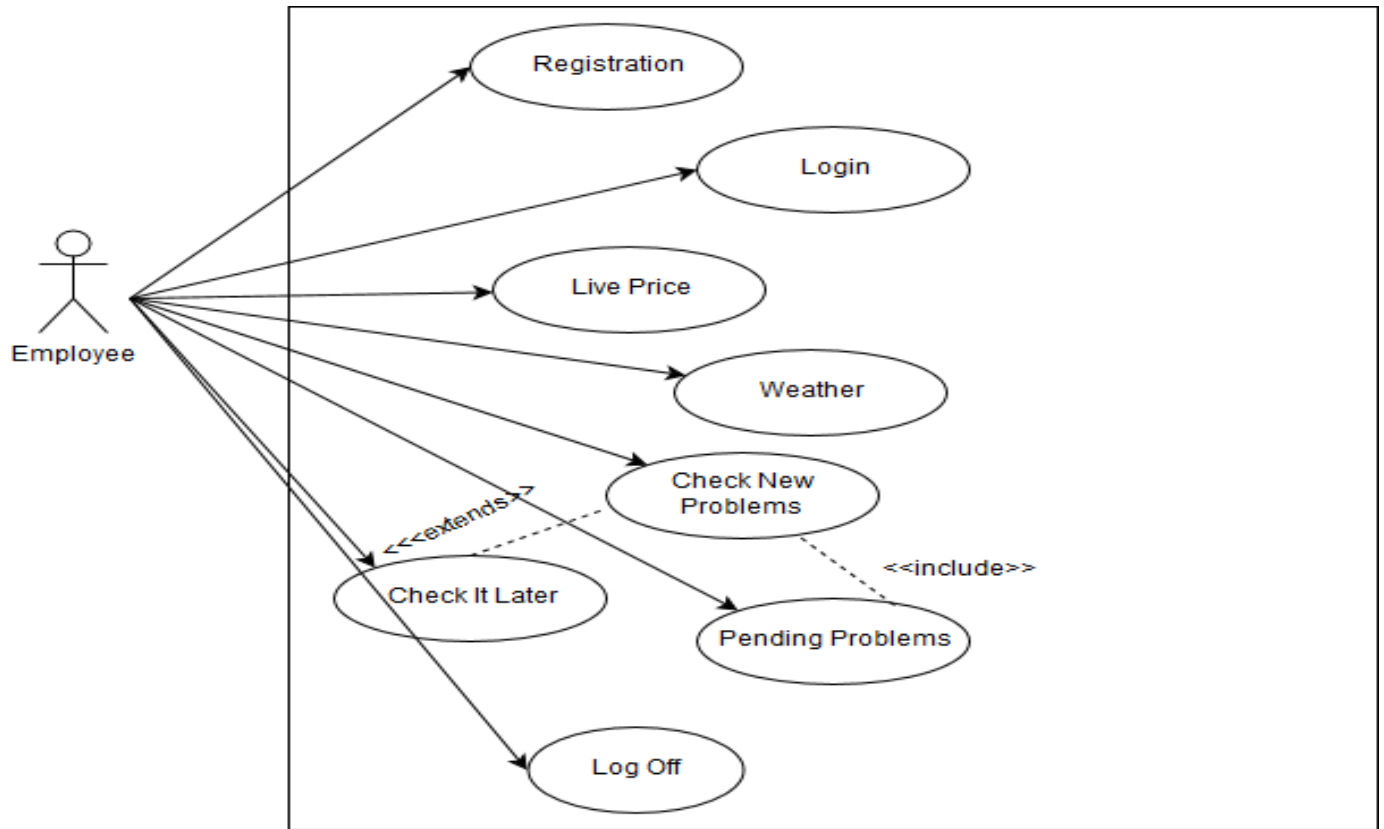
Figure 3.3: Use Case Diagram for employee [6]

Table 3.1: Use case description of Employee

Use Case #01	Employee Dashboard
Primary Actor	Employee
Secondary Actor	Null
Pre-condition	Must be a user
Scenario	• Check all the new question • Check all the pending question • Check weather

	• Check live price news
Post-condition	• Log off successfully

Table 3.2: Use case description of Farmer

Use Case #02	Farmer
Primary Actor	Farmer
Secondary Actor	Admin
Pre-condition	Must be a valid user
Scenario	• Creating Post • Check own posts. • Asking question • Submitting problem • Checking box for notification • Changing personal information • Changing image • Creating request for transport • Checking all the transport request.
Post-condition	• Log off successfully

3.4 Design Requirements

The design requirement is the one of the most important part of an application which makes an application unique from any other existing application. In our application we actually focused on the farming facilities over internet. We working with some special things with this project and this requirements are very much helpful for user who actually want to use our application and it will make the farming sector very closer. We designed our application by the following features.

- In our application we have two types of user one is farmer and other is employee.
- Farmers have to create their own account for access to this application.
- Farmer can create their own post and after creating posts they can see their posts.
- Farmers can ask question to the experts.
- Farmers can request for transport.
- Farmers can check all the transport requests.
- Farmers as well as employees can change their personal information and their own images.
- Employees can check all the new question that are questioned by farmers.
- Employees can check a question for later time.
- User can check weather information.
- User can check price list.

CHAPTER 4

Design Specification

4.1 Front-end Design

In any application the front end design is the visual part of an application. By which the user interacts with. In the perspective of designing, Front-end design is one of the most essential segments for the application. It represents the introduction layer and user can directly communicate with this.

It is very important to build up a straightforward and understandable front-end design or GUI for the user of an application. Therefore, while developing the app we tried to keep our design as simple as possible so that the user can easily access the app. We attach our application front-end design as follows:

In figure 4.1 it shows farmer registration
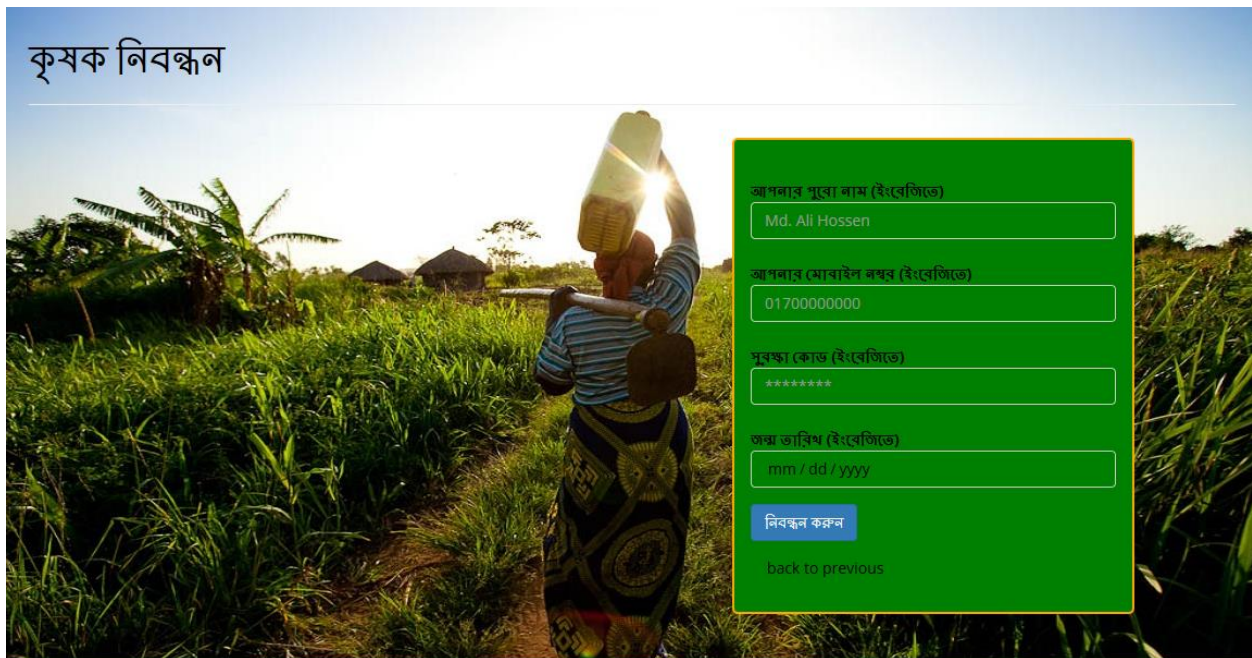
Figure 4.1: Farmer Registration

In Figure, 4.2 shows farmer login

Figure 4.2: Farmer Login

In Figure, 4.3 shows farmers dashboard

Figure 4.3: Farmer Dashboard

In Figure, 4.4 shows the forum in farmer module
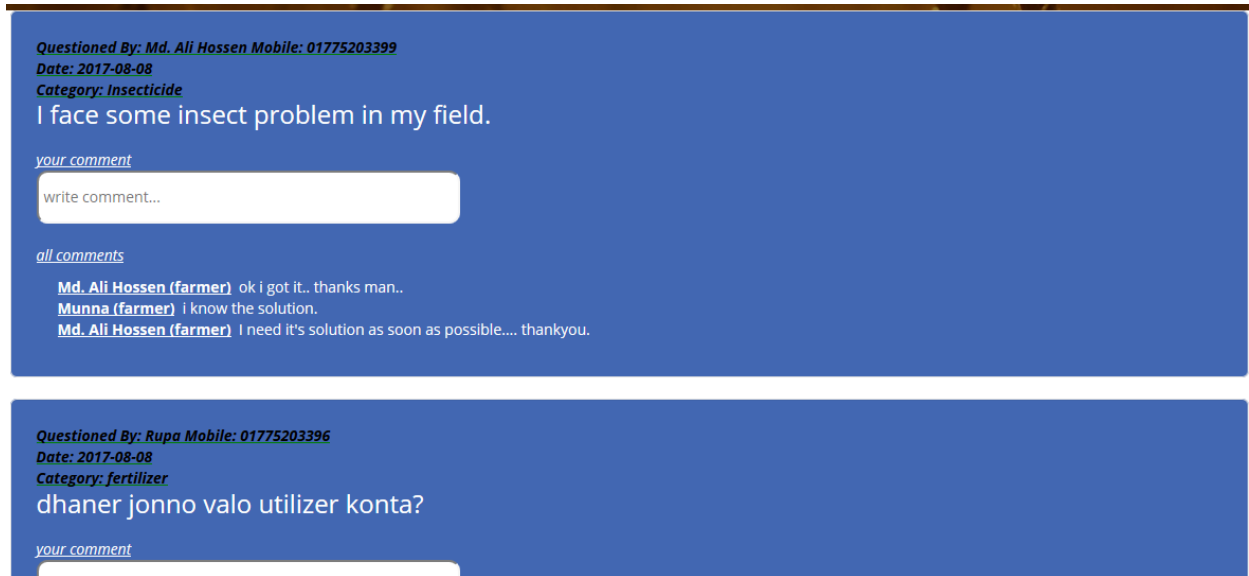
Figure 4.4: Farmers Forum

In Figure, 4.5 shows submit problem to experts
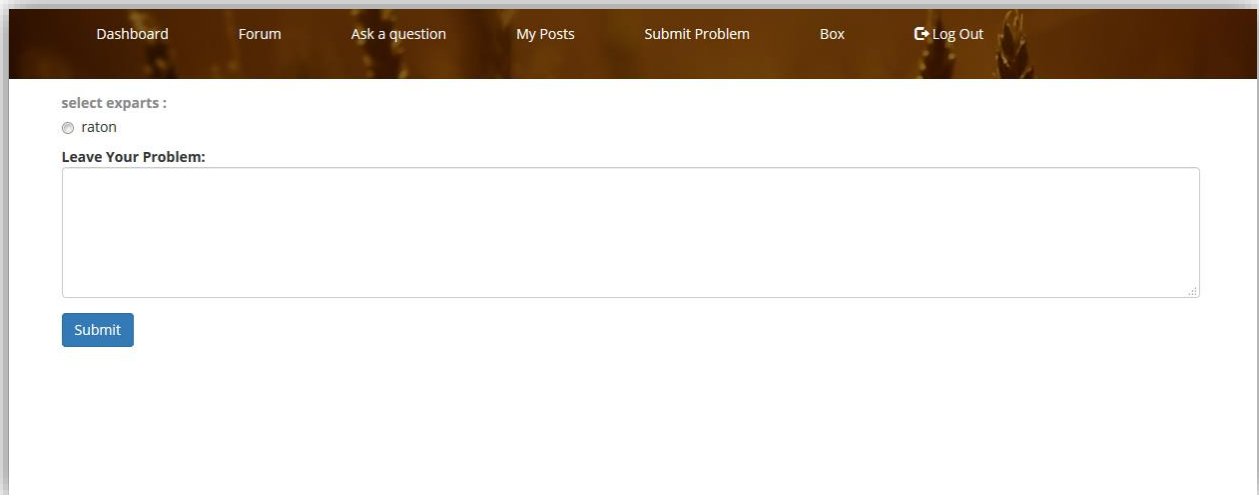
Figure 4.5: Submitting Problem to Experts

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In Figure, 4.6 shows ask question or creating posts

Figure 4.6: Ask Question or Creating Post

In Figure, 4.7 shows all the post of farmer

Figure 4.7: All the Post

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In Figure, 4.8 shows creating transport request by farmer

Figure 4.8: Creating Transport Request

In Figure, 4.9 shows check all the transport request of farmer

Figure 4.9: All the Transport Requests

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In Figure, 4.10 shows transport costs of a transport request
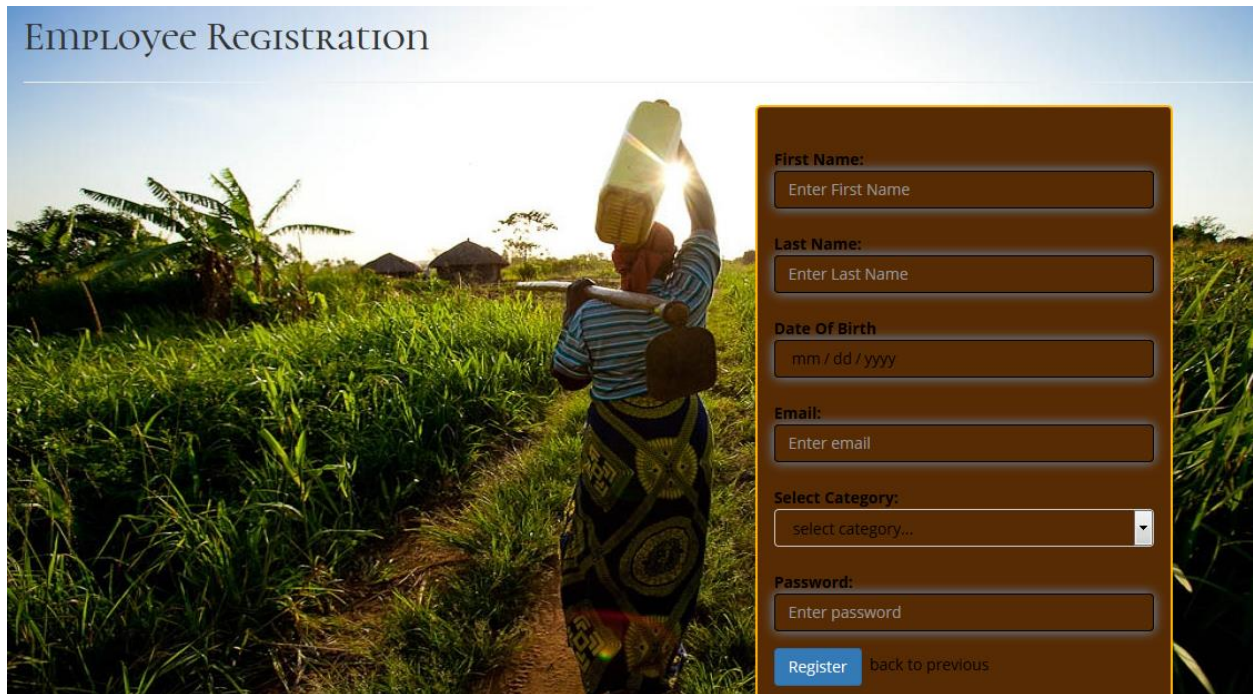
Figure 4.10: Transport Cost Detail

In Figure, 4.11 shows all the questions by a single farmer

Figure 4.11: All the Question

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In Figure, 4.12 shows employee registration
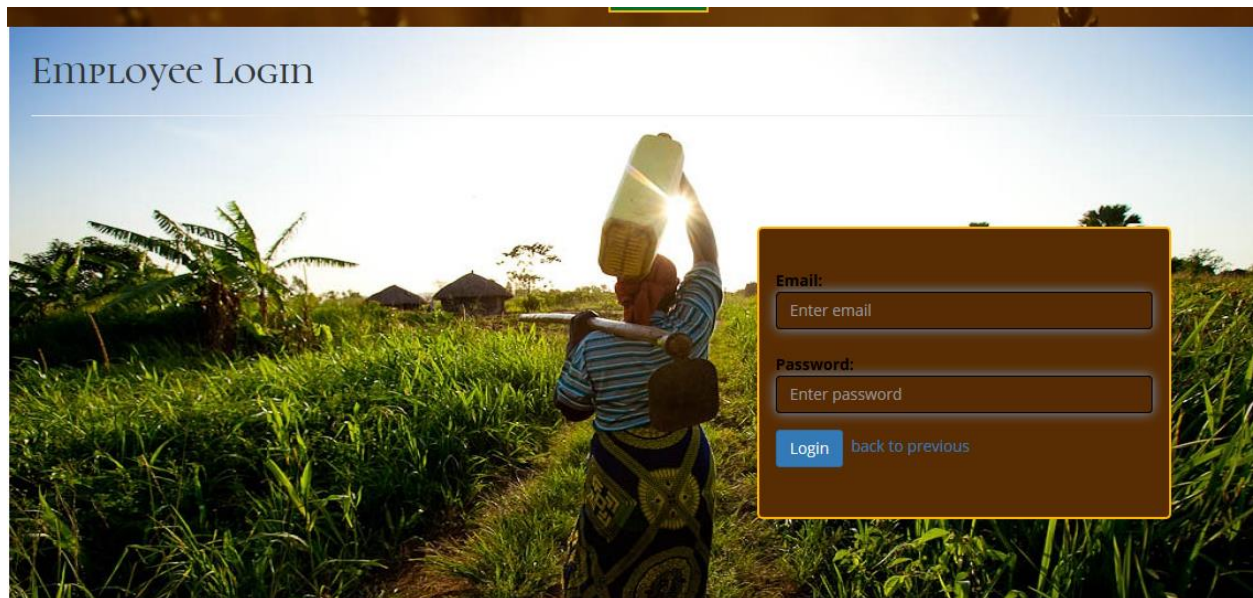
Figure 4.12: Employee Registration

In Figure, 4.13 shows employee login

Figure 4.13: Employee Login
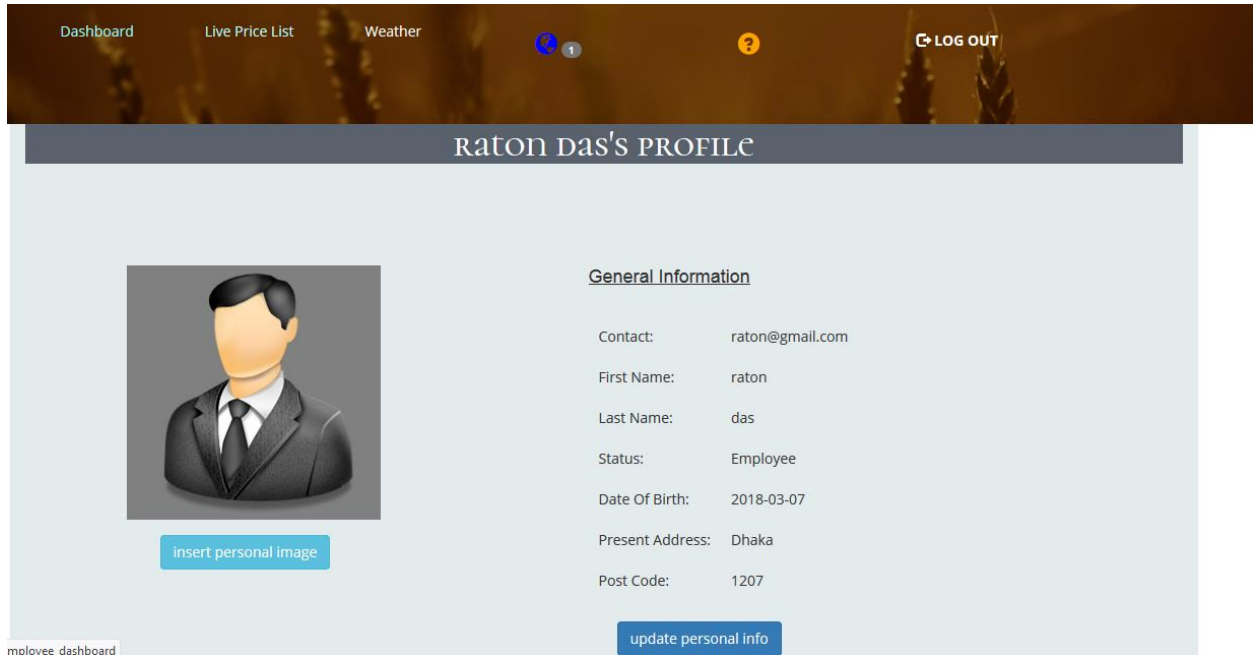
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In Figure, 4.14 shows employee dashboard

Figure 4.14: Employee Dashboard

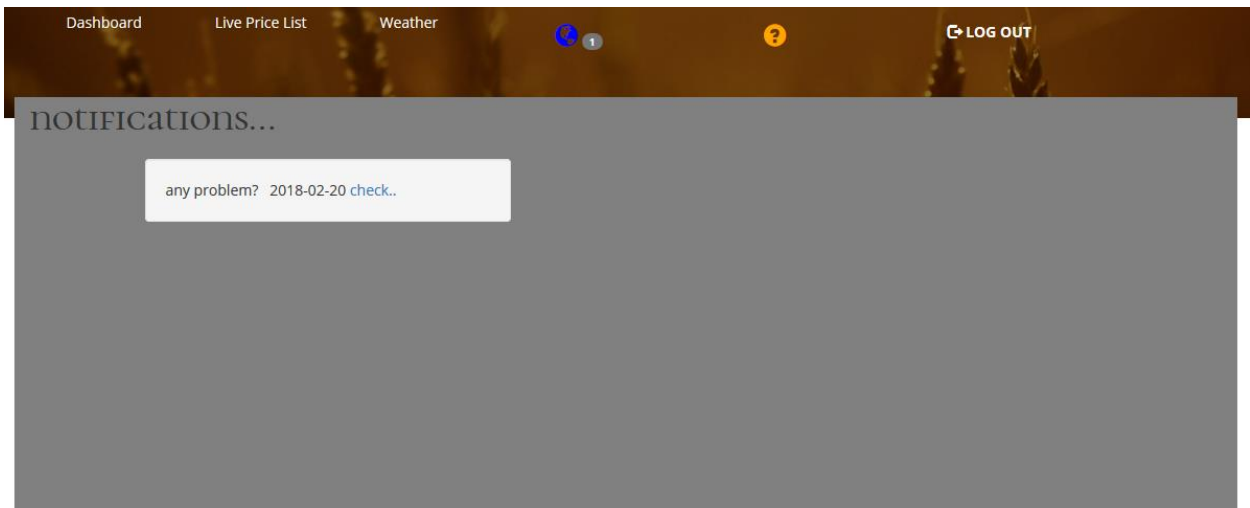In Figure, 4.15 shows employee new notifications

Figure 4.15: Employee New Notifications

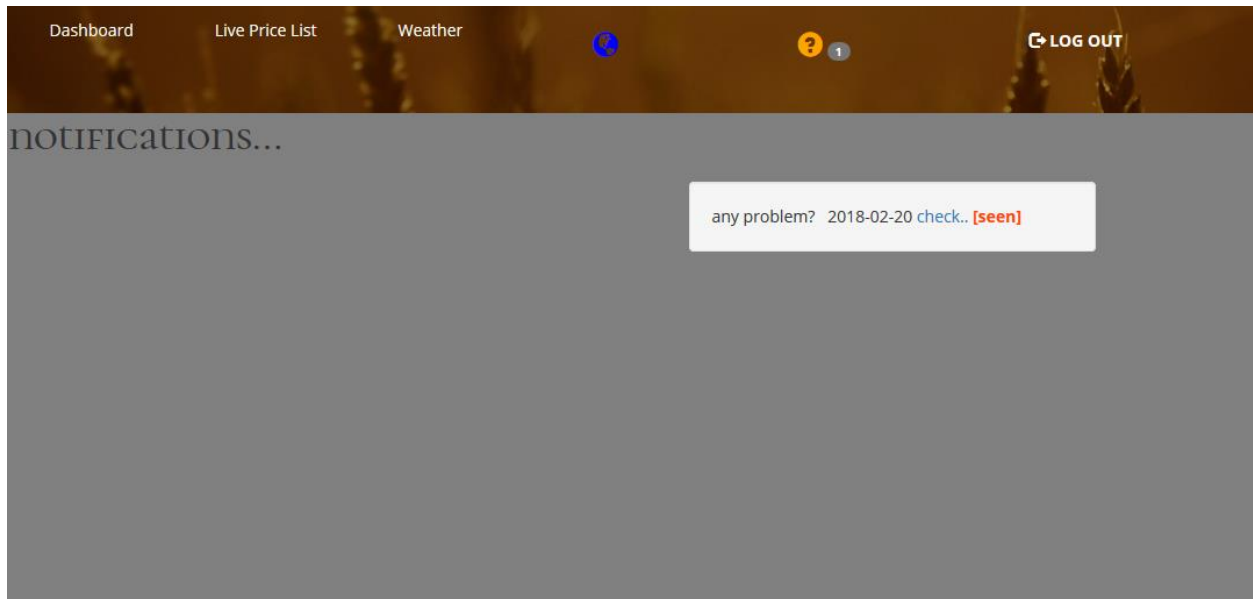In Figure, 4.16 shows employee pending notifications

Figure 4.16: Employee Pending Notifications

In Figure, 4.17shows employee provide solution
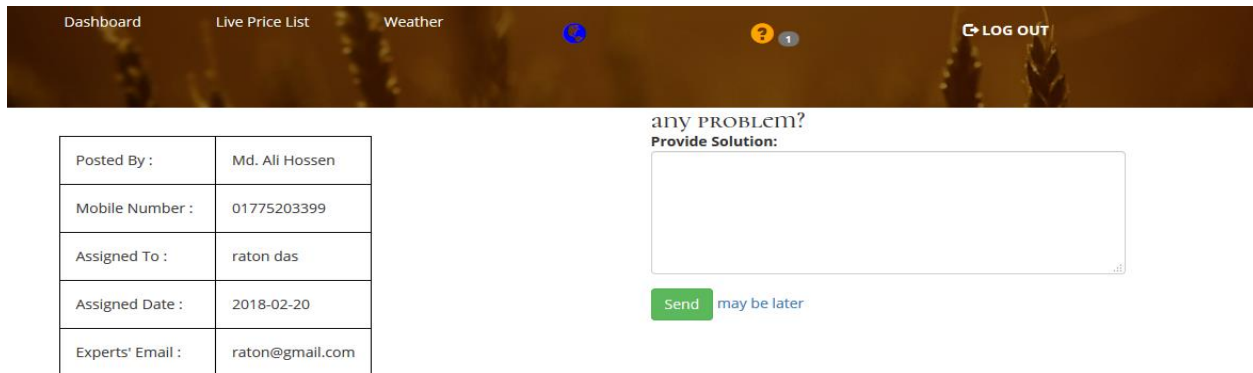
Figure4.17: Employee Provide Solution

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In Figure, 4.18 shows news

Figure 4.18: News

In Figure, 4.19 shows weather

Figure 4.19: Weather [13]

In Figure, 4.20 shows admin login

Figure 4.20: Admin Login

In Figure, 4.21 shows transport list of admin

Figure 4.21: Admin Transport List

4.2 Back-end Design

The Back-end design is the part that working behind of the project. The user can't see or notifying or the back-end part. There is only one-way user can interact with the app by front-in design. And the user cannot see the back-end design and how this part is working. In every application back-end does almost everything that happens on the server of the application. In web application, to handle back-end part is more complex than other application.

4.3 Interaction Design and UX

Interaction design represents interaction between the user and the application. Interaction design considered the procedures such that the user issue space, processing the issues and discovering the outcomes. It also performs activities by the regarding outcomes about and take care of the issue in the application.

Actually in any application user experience mainly focuses on the overall experiences between the users and the application. In our application, most of all the features can interact with the user. We are mainly focusing the functionality of the application and there is an option where the user needs to register and logging in the application by using his/her verified information such like email and password.

In our application for UX we have tried to give our user some great experiences by adding some new features. For better performance and experience for the user, we tried to keep our application simple and easier to use.

4.4 Implementation Requirements

To implement a project, we need to use different type of tools, components those help us to developed a project successfully. So in our application development we also used some tools and components. In the Implementation Requirement section, we mainly discussed about all the tools and components that we have used to develop our project.

To developing and maintaining the back-end section we use different technologies on our application. Our application's back-end design as follows:

- PHP is user for back-end programming design.
- We used LARAVEL framework which is associated with MVC pattern.
- We Html5, Css3, Bootstrap, JAVASCRIPT for design and other things.
- We used my MySQL database engine.

CHAPTER 5

Implementation and Testing

5.1 Implementation of Database

This chapter is focused on how we implement our database. As we mention earlier for our project we use MySQL database. All the data along with farmers, employees, posts, notification will be stored in our digital farming database.

5.1.1 Database Design

Digital farming data will be stored in our center database. The main functionality of database is SQL database. Its provider is MySQL provider. We deign each table with other table with a very easy way to implement for next developer.

Our main database name is **digital farming.**

Under this database there are several parts for different purpose and action in our Database which are:

1. Farmer module to store farmer's data.
2. Employee module to store employee data.
3. Post module to store all posted data from farmers.
4. Notification module to store all the data connected with notifications.
5. Transport module for store transporting data.
6. Cost module to store information related with costs.
7. Comments module to store data associated with comments.

Each Part has its own layout.

5.1.2 Storing Process of Data

Farmer or employee registration and login with their information and those information will be stored with this table.

Figure 5.1: Storing User's data

User's comments will be stored in this table.

Figure 5.2: Storing comments

Asking problem section will be stored here.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id 🔑	int(11)			No	None		AUTO_INCREMENT	🖉 Change
2	p_id	int(11)			No	None			🖉 Change
3	solution	longtext	latin1_swedish_ci		No	None			🖉 Change
4	f_id	int(111)			No	None			🖉 Change
5	ex_id	int(11)			No	None			🖉 Change
6	solution_date	date			No	None			🖉 Change

Figure 5.3: Storing asking problem

Cost will be stored here

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id 🔑	int(11)			No	None		AUTO_INCREMENT	🖉 Change ⊖ Drop 🔑 Primary 🇺 Unique 📄 Index ▽ More
2	phone	varchar(255)	latin1_swedish_ci		No	None			🖉 Change ⊖ Drop 🔑 Primary 🇺 Unique 📄 Index ▽ More
3	txd_id	varchar(255)	latin1_swedish_ci		No	None			🖉 Change ⊖ Drop 🔑 Primary 🇺 Unique 📄 Index ▽ More
4	amount	int(11)			No	None			🖉 Change ⊖ Drop 🔑 Primary 🇺 Unique 📄 Index ▽ More
5	dateOfPayment	date			No	None			🖉 Change ⊖ Drop 🔑 Primary 🇺 Unique 📄 Index ▽ More
6	requestId	int(11)			No	None			🖉 Change ⊖ Drop 🔑 Primary 🇺 Unique 📄 Index ▽ More

Figure 5.4: Storing cost or price information

Transport request will be stored here.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id 🔑	int(11)			No	None		AUTO_INCREMENT	🖉 Change ⊖ Drop 🔑 Primary 🇺 Unique 📄 Index 🔳 Spatial ▽ More
2	fare	int(11)			No	None			🖉 Change ⊖ Drop 🔑 Primary 🇺 Unique 📄 Index 🔳 Spatial ▽ More
3	vat	int(11)			No	None			🖉 Change ⊖ Drop 🔑 Primary 🇺 Unique 📄 Index 🔳 Spatial ▽ More
4	total_vat	float			No	None			🖉 Change ⊖ Drop 🔑 Primary 🇺 Unique 📄 Index 🔳 Spatial ▽ More
5	total	double			No	None			🖉 Change ⊖ Drop 🔑 Primary 🇺 Unique 📄 Index 🔳 Spatial ▽ More
6	requestId	int(11)			No	None			🖉 Change ⊖ Drop 🔑 Primary 🇺 Unique 📄 Index 🔳 Spatial ▽ More

Figure 5.5: Storing transport data

5.2 Implementation of front end design

How many user will use a system, is completely depend on the easy design and usability of the system. When a user opens our application, they will firstly see the front end design. This is a web application so user have to be use this application via internet and device which support internet. Some device is equipped with heavy hardware, some has large screen, and some are too small. Also android regularly release updated version of their OS. For this we have to make our design device independent and it is very challenging. So, we try our best to keep our design gorgeous also user friendly. We use very simple UI design, for this if any user open any feature of our application, by simply looking on the screen, they will understand what this feature do.

5.3 Implementation and Interaction

The successfulness of a system is completely depend on the interaction with the user. Now a days, interaction is found everywhere. Interaction is which makes a system popular and attractive to a user. So, it is very important to make a system interactive. We develop some unique feature to interact our system with user

We implement our system with responsive UI for better user experience. For this, we use easy texture, text link and button. The system is totally user friendly and user can easily interact with our system.

Our application is successfully implemented and has impressive interaction with the users.

5.4 Testing Implementation

Testing implementation is process of testing the implementation of a system, where tester or system architect will see various cases and specification, is it implementable or it has limitations.

Table 5.1: Testing Implementation

Test Case	Test Input	Expected Output	Actual Output	Result	Tested On
1. Employee Login	- Email address - Password Example : - user@gmail.com - User12345@	Login successfully completed	Login successfully completed	Passed	09/07/ 2017
2. Employee Registration	- First name - Last name - email	Registration successfully completed.	Registration successfully completed.	Passed	09/07/ 2017

2. Employee Registration	• Date of birth • Category • Password Example: • Md. Rasel • Khan • rasel@gmail.com • 1-1-1999 • Expert • rasel@1999	Registration successfully completed.	Registration successfully completed.	Passed	09/07/ 2017
3. Farmer Login	• Mobile Number • Password Example : • 01710000000 • user@gmail.com	Login successfully completed	Login successfully completed	Passed	25/07/ 2017
4. Farmer Registration	*Full Name * Mobile Number *Password *Birth Date	Registration successfully completed.	Registration successfully completed.	Passed	25/07/ 2017

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5. Ask a question	• your question • select category Example: • What is going on? • Type environment	Posted successfully	Posted successfully	passed	15/08/2017
6. Submit Problem	• Select category • Ask question	Successfully asked question.	Successfully asked question.	passed	04/09/2017
7. Transport Request	• Pick up point • Destination point • Date Example: • Dhaka • Khulna • 1-1-1999	Successfully requested.	Successfully requested..	passed	09/11/2017
9. Provide solutions	• Provide solution Example: • Solution here	Successfully Posted	Successfully Posted	passed	16/01/2018

5.5 Test Results and Reports

Test Report represent the result of the test in a formal way. Report contains the data which we evaluated in a professional and organized manner. Report describe the operating condition and shows the test result with test objective.

In chapter **5.4**, we shown the test case, test input, expected output, actual output and finally we find out our results and the test result of this application was successful. We perform usability test to check the user satisfaction. Usability testing check the following feature of the app.

- How easy it is to use the application?
- How easy it is to learn the application?
- How convenient is the application to end-user?

So at the end we can carry out the results as the benefits of usability testing to the end of the user or learner.

- Good application quality.
- Application is easy to use.
- Application is positively accepted by users.
- All type of information for the new users.
- Easy and understandable UI for interaction.
- Some innovative idea for the monitoring system.

CHAPTER 6

Conclusion and Future Scope

6.1 Discussion and Conclusion

This system is actually for those people who are involved in farming sectors and who want to make communication and want to share and learn more with the farming community. This application has a user friendly design.

The main reason to build this application is to create a huge amount of community of farming. In our present world everything is closer to other. We want to make farming sectors more familiar to people. Sometimes we can see, people are not able to know or express about their problem timely and they have to face a great damage. Our vision is to reduce those damage by communicating with one person to another. This will help to make a healthy world.

6.2 Limitations

Like all the things in our world nothing is 100% perfect. Our application also has some limitation. We will try our best to reduce the limitation of our application in future version.

Some of the limitations are:

- Collecting initial resources.
- Managing a huge amount of data.

6.3 Scope for Future Developments

- We will integrated this system with other social platforms for better community.
- We will add phone SMS system for better usability.
- We will make an android application.
- We will make it more reliable and user friendly to user.
- We will update our application periodically.

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APPENDIX

Appendix A: Project Reflection

The purpose of this appendix is about project reflection. From summer 2017 semester we started our journey to make this application .The main feature of our application is digital farming. Also using our application people can easily communicate with farmers that will help them to find out their practical problems. Firstly we build a model for our project then we implement our project step by step. After many hard work and spending a lot of time finally we were able to reach our goal.

The project "Digital Farming" will be very helpful for not only farmers but also for a normal person. People will get help easily from home.

So we believe that our "Digital Farming "application will be a positive and effective for users.
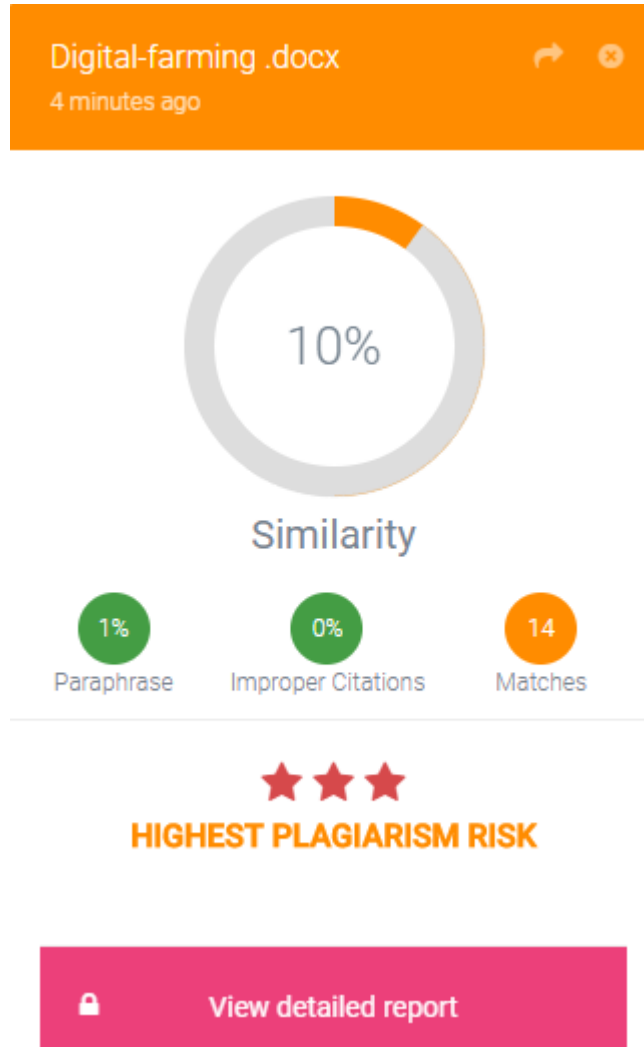
Plagiarism Report

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Figure: Plagiarism Report