

ANDROID BASED PROJECT REPORT ON

MODERN AGRI

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of
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APPROVAL

This Project/internship titled “**Modern Agri**”, submitted by Jahidul Islam , ID No: 161-15-7620 and Nazmun Nahar, ID No: 161-15-7625 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 and approved as to its style and contents. The presentation has been held on 05-12-2019.

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DECLARATION

We hereby declare that, this project has been done by us under the supervision of **MS.ITISHA NOWRIN, Lecturer, Department of CSE** at 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.

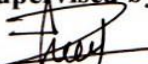
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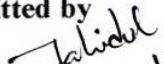
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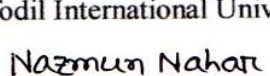
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ABSTRACT

Although Bangladesh is an Agricultural Country. But in this modern technological era Agricultural sites are lagging behind. Because maximum rural peoples are illiterate and involved in Agriculture. As Bengali is our mother tongue so it will easy to understand for them. For solving this problem and for using modern technology in agricultural sites we tried to develop an android Mobile Application which Language will Bengali. “MODERN AGRI” is an android based Mobile Application. Which is related to our Agricultural sector. Our application has some goals. Determination of crop suitable for land. Which season is best suited for a crop. Complete process of soil formation before crop cultivation. When to use fertilizer on the land and how much fertilizer to use. How to cure and prevent crop germs. Also the current weather in the current location. Various market information will be available to know the price of a crop at this time. There are several steps in the type of crop, the name of the crop and the type of crop. The varieties of the crop include selected crop details, such as crop specific, cultivated areas, time of sowing, harvesting time, prevention of crop diseases and reproduction, fertilizer management etc. We have kept this arrangement for farmers only for fertilizer recommendations. Without knowing about the soil in general, it is very difficult to say. We have collaborated with the Soil Resource Development Institute for this. If a farmer's land is informed in a union of a sub district, its crop type, crop, amount of land and class of land, the farmer will be able to get proper fertilizer recommendations for his land. This Application will more helpful for users. Student and Teachers can collect agricultural data for their purpose.

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CHAPTER 1

Introduction

1.1 Introduction

Modern Technology is an improvement of old technology. The influence of technology in modern life is uncountable, we use technology in different ways in our daily life. Modern technology is technically not so new in some cases. For example, mobile phone technology has resulted from what it was in the year 2000 and continued to do so today. Nowadays we use smartphones which is an advanced version of an older mobile phone.

We use modern technology to make our daily life more comfortable and easy. At times modern technology may replace previously used technology due to its increased benefits. In this new era we can't think our regular life without smart technology. Smartphone is one of the blessings of modern technology. Smartphone makes our life easier in every sector of life. That's why we are going to create an android based Mobile Application, which name is "Modern Agree".

If we look at the developed world, we can see that the key to their improvement is rooted in advanced technology. They are far ahead of us in every sectors. We can't properly use smart technology in every sectors, specially in agricultural sector in our country.

Bangladesh is an Agricultural Country. So, Agriculture is an important sector in Bangladesh's economy. A Plurality of our country earn their living from Agriculture. Our project Modern Agree is designed to help the Farmers of our country. It will make farmers works much easier. When all sectors of the world advance in the advancement of modern technology, it is impossible to imagine the agriculture sector lagging behind. So we tried to make a smart Application in Agriculture Sector.

1.2 Motivation

Agriculture is the largest employment sector in Bangladesh. There was a time when 80 percent of the country was involved in farming. Due to rapid urbanization and industrialization, the situation is not present. Now only 48 percent of the country is directly involved in farming. The remaining 52 percent of the people belong to the industry and service sector.

There are about 80 million 30 thousand hectares of cultivable land for the 16 million people of Bangladesh. About a quarter of these are under threat. On an average, 2,996 bighas of agricultural land are being lost every day for commercial reasons. The converted land is being used in non-agricultural sector. Every day, the total agricultural land is reduced to 96 bigha by filling the water bodies. Besides, the fertility of 9,000 acres of agricultural land is being lost every day due to tobacco cultivation. Statistics show that there are 8.52 million hectares of agricultural land in total. In this land the farmers of the country produce agricultural produce and the food needs of the people of the country are met by the food grains produced in this land. Every year, 68,760 hectares of arable land are shifted to the non-agricultural sector. The total area of arable land in Bangladesh in 1976 was 9 decimal 762 million hectares. In the last 40 years, the amount of land has decreased by 1 to 242 million hectares. Agricultural land is becoming non-agricultural land for unplanned industrialization and urbanization. Thus, we are losing agricultural land every day.

Every year a large number of crops in Bangladesh destroy insects. Many crops grown in it do not grow in the farmer's house.

Considering the increase in population of the country, the loss of crop land, insects and natural disasters, all farmers want to determine the right crop for their land in good crop results. But this is not an easy task for them. Proper knowledge of the field is needed to determine the right crop for the land and to take care of it properly. For high valued productivity it's important to develop new agricultural Technologies which can help our farmers by giving proper advice.

With the overall development of the country, people's purchasing power is increasing day by day, with the use of modern technology and materials. Smartphone usage in Bangladesh is estimated to be around 45%. As Bangladesh is a developing Country usages of smartphone will increase day by day. So our modern agri app will make farming easier to the farmers.

1.3 Objectives

- Developing a Smartphone Application.
- Providing Suggestions to the Farmers about land, soil and crops.
- Data Collection
- Providing suggestions about market prices of Fertilizer and seeds of crops.
- Disease prevention and cure of different types of vegetables and crops.
- Current location weather.

1.4 Expected Outcome

- Development of Agricultural sites on Mobile Application
- To make farmers works easier.
- Providing proper instruction to the user about which land is better for which crops/vegetables.
- Enable easier access to agricultural information.
- Get suggestion about varies of market prices of seeds and fertilizer.
- Encouraging unemployed educated young people in agriculture sector.

1.5 Report Layout

This part plays an important role in Project documentation. Layout of reports indicate structural patterns of the report. Report Layout arranges contents of project in different sections. Use of sections makes report easier to the readers. Our report also arranged in different categories. We arranged our project report in 6 chapters, Acknowledgement, Abstract, Table of contents, List of figures, List of Tables and References. These are discussed below:

Chapter 1: In chapter 1, we discussed about Introduction of the project and completed introductory part. Which indicates why Modern agri application is important, Motivation of the project work, Objectives and Expected outcome of our project.

Chapter 2: In chapter 2 we specified about the background part of the project. Also have discussed more about the related work of the application. We also focus on comparative studies, Scope of the problem and Challenges of this Application.

Chapter 3: In chapter 3, we tried to discuss about Requirement Specification. In this section we have included some models. Business process model, Requirement collection and analysis. Which contains Functional requirement and non-functional requirements. Use case model and description and Logical data model also included.

Chapter 4: In chapter 3, we specified about Design Specification. This part will describe about Front-End design. In this section we added some figure of Home page, Log in page and another activity of our Application. In this section also added Back-end design. Back-end part includes authentication and data base and UX of the design.

Chapter 5: In chap 5, we tried to discuss about Implementation and Testing of the project. Test case evaluation table, Test results and Reports.

Chapter 6: At the end, in chapter 6, we specified about conclusion, Future plan of the project and solution of the problems.

CHAPTER 2

Background

2.1 Introduction

Android based Mobile Application “Modern Agree” is an agriculture related work. The purpose of our work is to introduce our user within modern technology. Object Oriented Programming (OOP) is a very popular and demanded Language. OOP also known as Java programming Language. This language based on the “Objects” and classes. We uses java language to modify our Application. It can access and modify data objects. We used Firebase to support database of our project. User interface is good in our project. User can use this application after Registration. After login username and Password they can use our Modern Agri application easily.

2.2 Related Works

Smartphone is a wonderful invention of modern Technology. Our project Modern Agree is an android based mobile Application. Our main target is to help our farmers and users who are interested in farming. This work will reduce the gap between rural people and the government with rural development. Much work has been done on Agriculture in the current situation. Some works on Web based project, some works for image processing. But we tried to work in Mobile Application. Our apps will detect soil structure and provide varies of market prices of seeds and fertilizer. It will more helpful to our Application users.

Some works on Web based project, some works for image processing. But we tried to work in Mobile Application. Our apps will detect soil structure and provide varies of market prices of seeds and fertilizer. It will more helpful to our Application users.

2.3 Comparative Studies

If we try to compare our system of studies with other development countries we will be disappointed. Because they are one step ahead from us. Since they are following these types of development system from a few years ago so they will make progress. Lacking of our modern Technologies and system we are far behind other developed country and nation. They are improving every sectors like developing and Technical sectors. In Agricultural sector they uses smart technologies but in our country farmers works physically hard and soul but they don't get expected outcome. So it's the right time to develop our study systems as early as possible and develop our Agricultural sector by modern Technology.

2.4 Scope of the Problem

Government of our country can play a vital role in this sector by using smart Technology. But in our country maximum rural Farmers are uneducated and they are not familiar with smart Technology. But if our government want to develop smart technology then they will face many technical problems. Because they have no familiarity with modern technology. Using expert trainer and making user friendly system government can reduce this problem.

2.5 Challenges

To implement every new systems have to face a lot of problems. Setting up a new idea is really challenging. At the first moment of our project it was too much difficult to create this Mobile application. Because everything was unknown to us. There was no real time data to us. To develop this project we had to learn a lot of Things. We have learned Java language for programming and uses xml files for designing our activity. We used real time data by firebase. The challenging section was when we collected our Data for our database. We faces a lot of difficulties for collecting data. We have to make our work user-friendly. Challenges are a part of systems. So if we will solve our works step by step we will successful and fulfilled our challenges.

Every system, especially which is new, have many problems to implement. But challenges are part of a system. If we can make necessary step to make defend then we will be successful. So, we have to make user friendly system because our current generation is not too much friendly with this kind of system. Using expert trainer and user-friendly system we can defend any challenge.

CHAPTER 3

Requirement Specification

3.1 Business Process Modeling

Business process modeling is the graphical representation of workflows of any Company's business process. This process identify potential business process. BPM also represents the improvement of any company's workflow. This model is represented by different graphical methods. Such as Flowchart, Graphical user Interface and Data Flow Diagram. Design of our project's business process modeling given below at Figure: 3.1. This process represents the whole work flows of our Application.

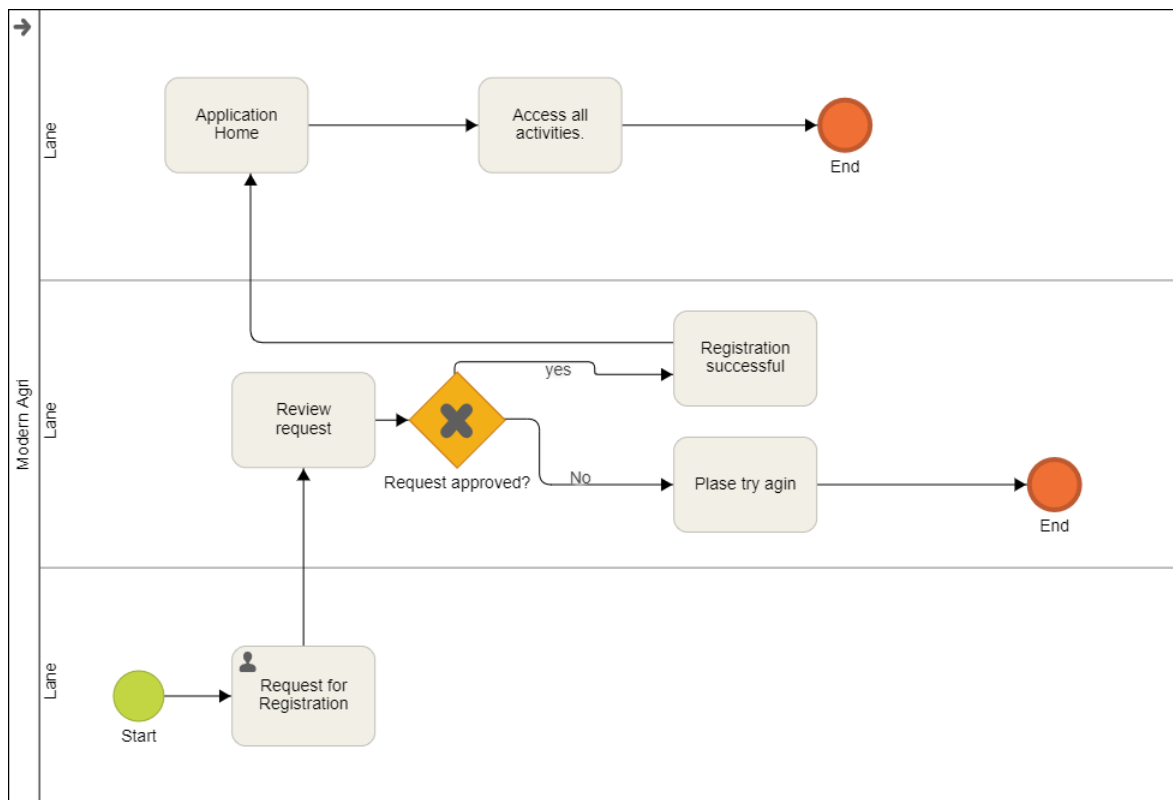


Figure3.1: Business Process Modeling

3.2 Requirement Collection and Analysis

Requirement Collection and Analysis is interacting with the user to understand the project needs. Sometimes user don't understand what they want from the project. In that case requirement Collection techniques can help us to obtain all the requirement from user. It is the expectation of the users from the project. In any Application requirement collection and analysis is primary condition. Requirement analysis system determine the exact needs of the users. This system is critical to success or failure. After collecting requirement from users need to documented and show them by flowchart. For collecting requirement from the user. There are two types of conditions.

1. Functional Requirement
2. Non Functional Requirement

3.2.1 Functional Requirement

Describe a process or an activity which will must perform by the system. In our project there is many functional requirement. User need to registration with their user name and password for sign in. This is the first step. They will not be able to log into the system if they have a wrong password. There are other functional requirement in our project. User will get an idea about current weather. If any user want to know about the soil types the need to add the name of their location.

3.2.2 Non Functional Requirement

Non Functional Requirement describe a process or an activity which is optional for the system. This types of functional work depends on the user. In our project if user is already registered they don't need to perform registration. Registered user can directly log into the Application. In this case user registration is a non- functional requirement. Another non- functional part is user sign out from the Application. It's also depends on the user.

3.3 Use Case Modeling and Description

The Use Case model is a model which represents how different types of users interact with the system to solve their problems. The use case model is a very powerful model to describe and interact with the user, actors and the system. Use case model is graphically represented by the developer to describe his/ her work to the user. In this model the most important elements are use cases, actors and the goals of works between them. It also helps the developer to represent their critical works step by step using flowchart. In Fig: 3.2 we described the use case model.

3.3.1 Use Case Model of Modern Agri

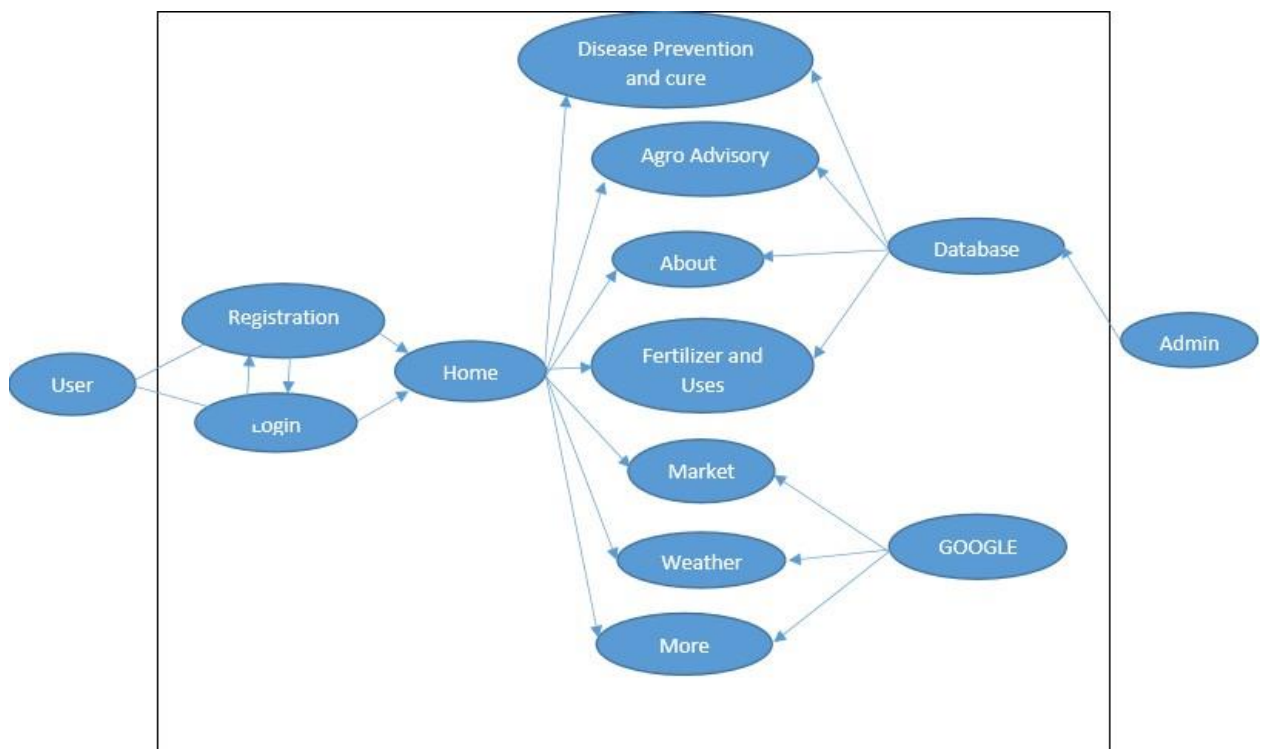


Figure 3.2: Use-case Model

3.4 Logical Data Model

The logical data model is which describes the data set in detail without knowing how they will be physically implemented in database. Logical data model represent database in a standard languages and notation. Logical data model based on these actions given below:

- Entities
- Attributes of entities
- Group of keys(Primary keys and Foreign Keys)
- Relationship between attribute to entities.
- Normalization

Entities: The entities represent persons, places, or event. Entity is denoted by Rectangular shapes. For example, entities are customer, Item, Purchase order, Retail and many other nouns. It is a Primary key.

Attributes: Names and Characteristics of an entity types. For an attribute need to add unique ID. For an example, Customer uniquely will have a UserID. Item uniquely have ItemID.

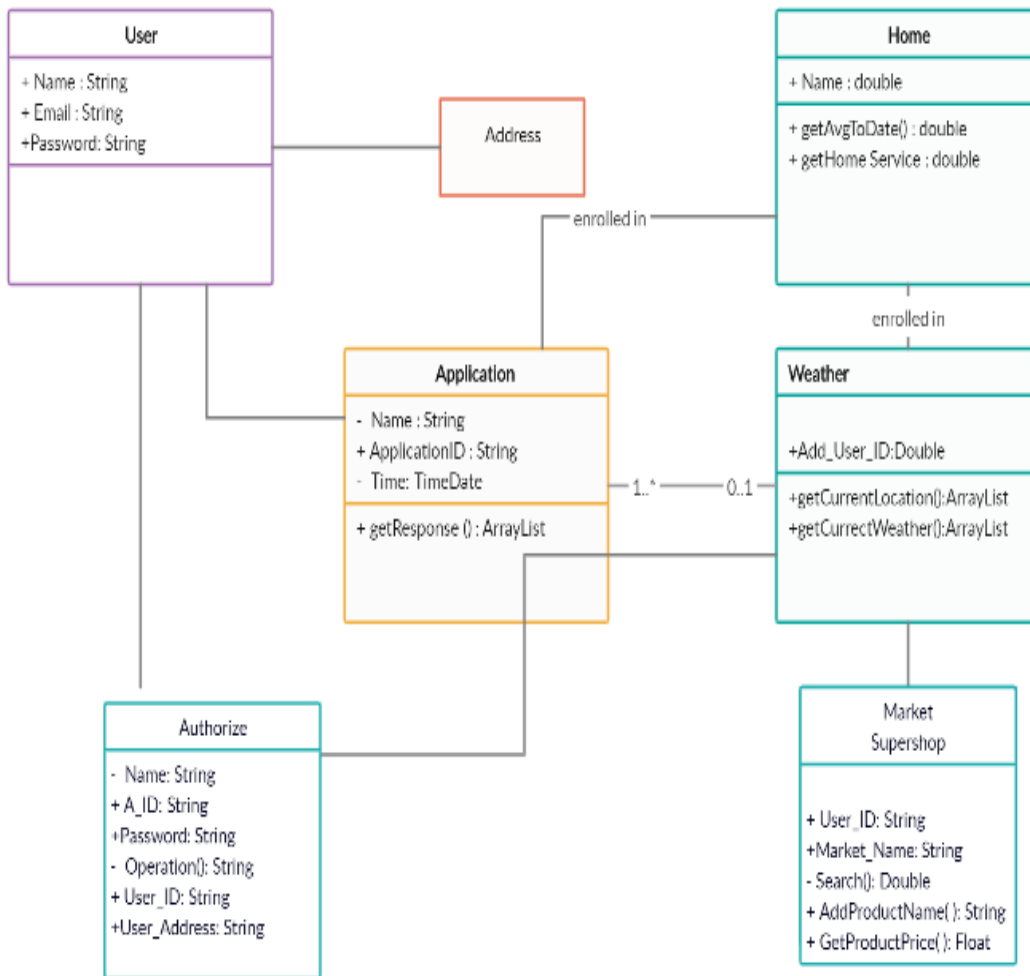


Figure 3.3: Logical Data Model

This figure is representing the Logical Data Model of our Project Modern Agri. Which indicates the relation between the authorized and the users. In the user class need to enter user id, user name and password which is registered by the user. Users are dependent on authorized class. When user enter any username or password if it won't correct then user will get an error message by authorizers.

In the market class we will try to show some super shops name which will help our users to know the real market prices of the seeds and crops and Fertilizers. As they can see different types of markets products and the prices of the market they can understand the difference of prices of the market. Logical data model is an representation of architecture of our modern agri project. Using this model we are able to discuss the main architecture of our project. This is easy to show the relation between the every activity of our project using Logical data model.

CHAPTER 4

Design Specification

4.1 Introduction

Design Specification is describe how the system is designed to develop a new project. For building an application firstly we select an appropriate place that means I will work on this. After selection then we have work core functionality of this sites. Then we have to a plan to design and working methodology of this application. After that we will make a perfect design for this application. Design specification discuss about this matter that how a design will be developed for a system. Now this time I will show the front-end and back end design of my classroom booking system web application and admin panel. And in this section we will discuss about many tool and platforms.

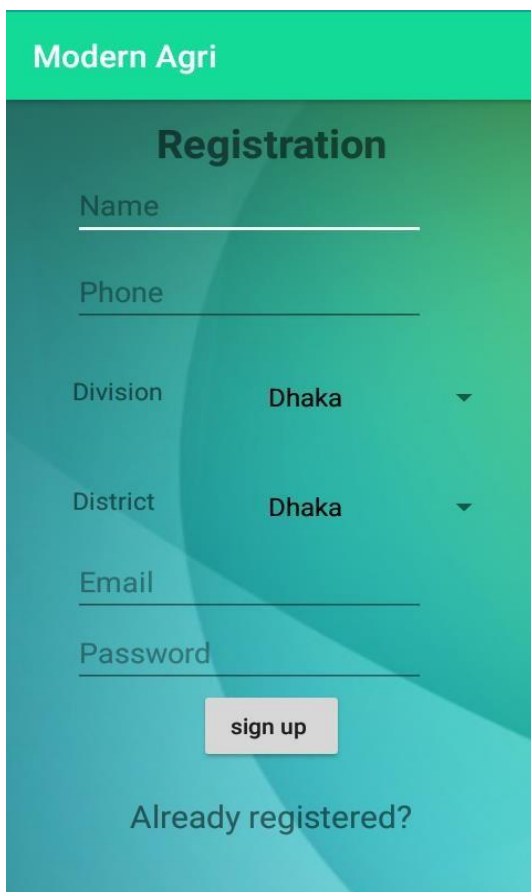
In this chapter we will discuss about Front-end and back-end design of our Modern Agri Application. Our system is totally private. Only authorized people can access our Application. Those are the Admin panel. So it will challenging to make our system user friendly. But our Application will more secure.

4.2 Front-end Design

Front-end Design describe those design which we can see in front of our Application. Front page of our Application. Is designed with different activities. Our Application is an Android based mobile Application. After installing modern agri application user can see some designed activities, which are named as front-end design of an Application. For designing any android mobile application need to use xml files, which is only work for design part. We used XML files to design our system and used Java and JavaScript for managing the contents in our application. Used JavaScript to working this application in a smooth way, looking good to see. As our Application is android based so without android phone user can't install our Modern Agri Application.

4.2.1 User Registration and Login Page

Our first activity is user registration and login page. Figure 4.1 is user Registration page and Figure 4.2 is user login page. Firstly user have to registration entering username and password for login next page. If user done their registration once they can login successfully. But if any user entered wrong username or password they can't log into our Application. Without registration no user will be able to enter the Home page of our Application.



Modern Agri

Registration

Name

Phone

Division **Dhaka** ▼

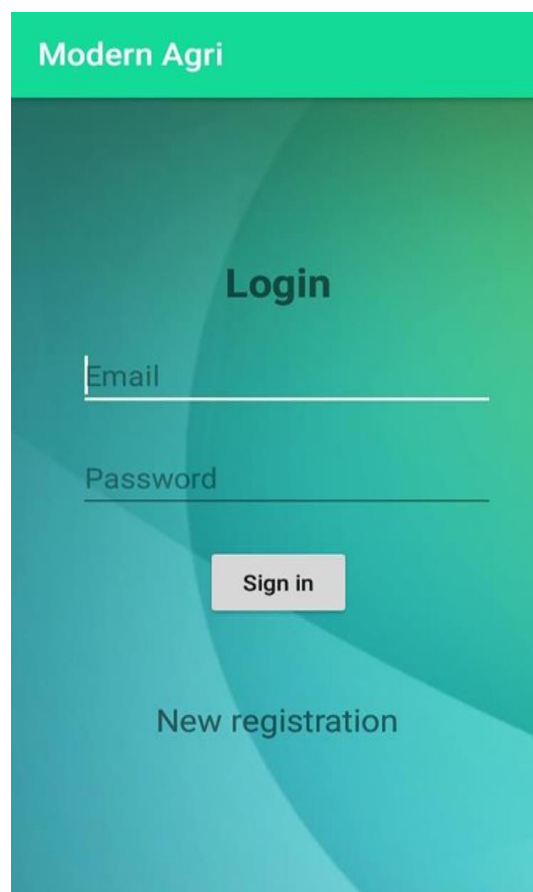
District **Dhaka** ▼

Email

Password

[Already registered?](#)

Figure 4.1: Registration page for user



Modern Agri

Login

Email

Password

[New registration](#)

Figure 4.2 Login page for user

From the activity of login page, user can enter into the Login page after complete the registration successfully. After entering User name and password provided by the users. If user name or password enter incorrect then user will not be able to enter or log into the application.

4.2.2 Application Home page

In Modern Agri Fig: 4.3 is the Home page of our Application. After successfully registration user can enter into this Home page. This will show registered user's email at the front of the activity. If user clicked to enter the home page they can see some options. They are Weather, Agro Advisory, Fertilizers and Uses, Disease Prevention and Cure, Market, More, and at last about option.

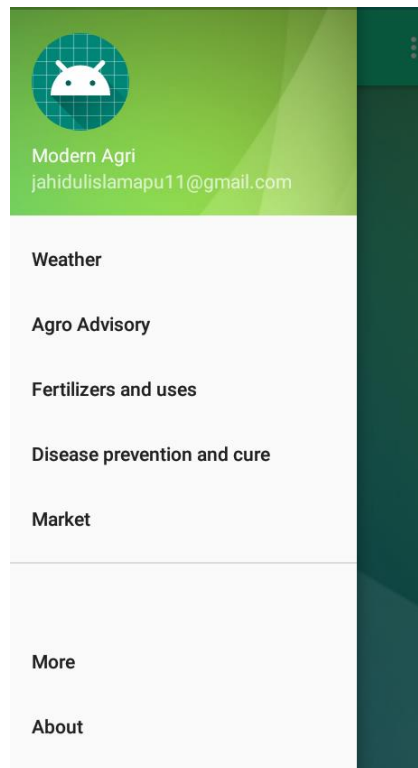


Figure 4.3: Application Home page

This is the Home page of our Application. After successfully registration user can enter into this

page. This will show registered user's email at the front of the activity. If user clicked to enter the home page they can see some options. They are Weather, Agro Advisory, Fertilizers and Uses,

Disease Prevention and Cure, Market, More, and at last about option.

These all are separate activity in our application.

- **Weather**

When any user clicks on Weather activity, they will know about the current weather based on their location. If the day will sunny in their location then this weather activity will show today is Sunny or if the day will cloudy, then it will show today is cloudy.

- **Activity Agro Advisory**

In this activity we will try to provide some advice to help our users. There are several steps in the type of crop, the name of the crop and the type of crop. The varieties of the crop include selected crop details, such as crop specific, cultivated areas, time of sowing, harvesting time, prevention of crop diseases and reproduction, fertilizer management etc.

- **Fertilizers and Uses**

We have kept this arrangement for farmers only for fertilizer recommendations. Without knowing about the soil in general, it is very difficult to say. We have collaborated with the Soil Resource Development Institute for this. If a farmer's land is informed in a union of a sub district, its crop type, crop, amount of land and class of land, the farmer will be able to get proper fertilizer recommendations for his land.

- **Disease prevention and cure**

In this activity we will try to provide some facilities for the farmers only in the prevention and promotion of crop diseases. Here user can learn about the prevention and cure of the disease in his scheduled crop.

- **Market**

After clicking market activity user will see the price ranges of seeds of crops and fertilizer by

different markets. User will gain knowledge of varies of market prices. This activity will more helpful for our users.

Crop selection Activity: In this activity we added many data of crops which is suitable for which land. For this we have collected data for different areas based on Union in our country. We have added data of different types of crops and vegetables in different areas. User need to select their area based on District and then need to select Union. After added present location user can find soil types and which crops are suitable for this types of soil and which is more productive for their area.

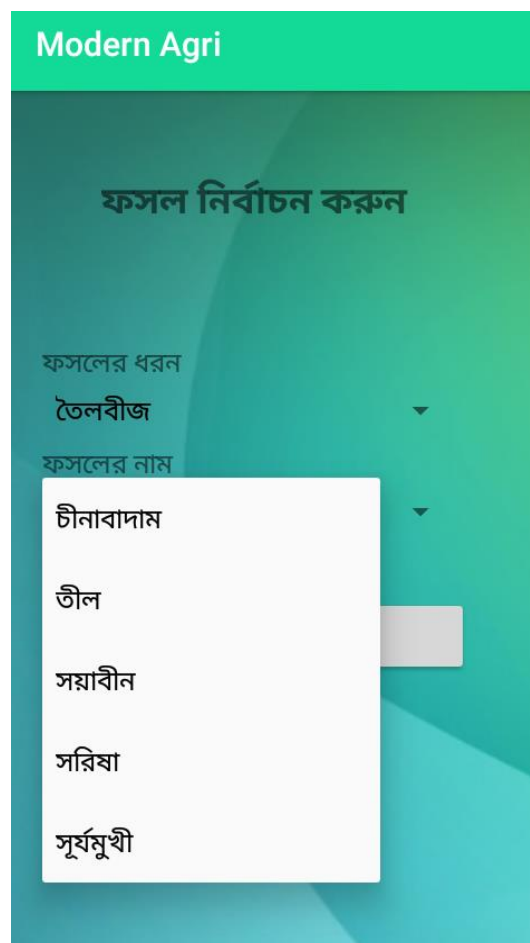


Figure 4.4: Crop selection activity

Agro Advisory: In this activity we will try to provide some advice to help our users. There are

several steps in the type of crop, the name of the crop and the type of crop. The varieties of the crop include selected crop details, such as crop specific, cultivated areas, time of sowing, harvesting time, prevention of crop diseases and reproduction, fertilizer management etc. User will concern about their soil types and crops productivity in short times by finding proper advice with our Application. We have added many data of different types of crops in this activity which will helpful for our user. User will find proper data about crops types and which time or in which season this crops need to cultivate for their area.

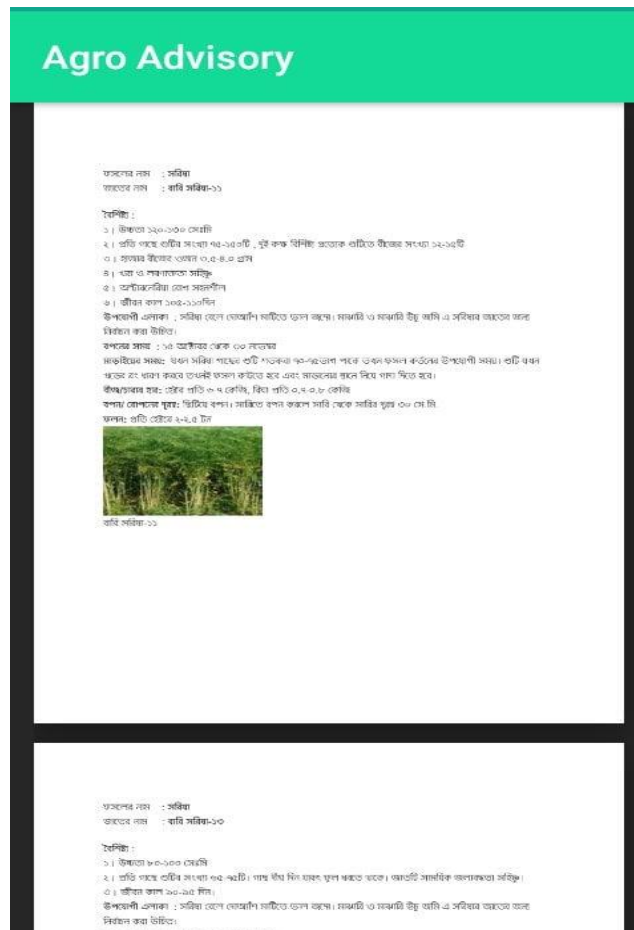


Figure 4.5: Agro Advisory Activity

Fertilizers and Uses Activity: In our application we have added Fertilizers and uses activity which will more helpful for our users. We have kept this arrangement for farmers only for fertilizer recommendations. Without knowing about the soil in general, it is very difficult to say. We have collaborated with the Soil Resource Development Institute for this. If a farmer's land is informed in a union of a sub district, its crop type, crop, amount of land and class of land, the farmer will be able to get proper fertilizer recommendations for his land. We will provide information to the users about their soil types based on their location. As our system will provide Bengali language so that every types of user in our country can easily understand and it will helpful for the users.

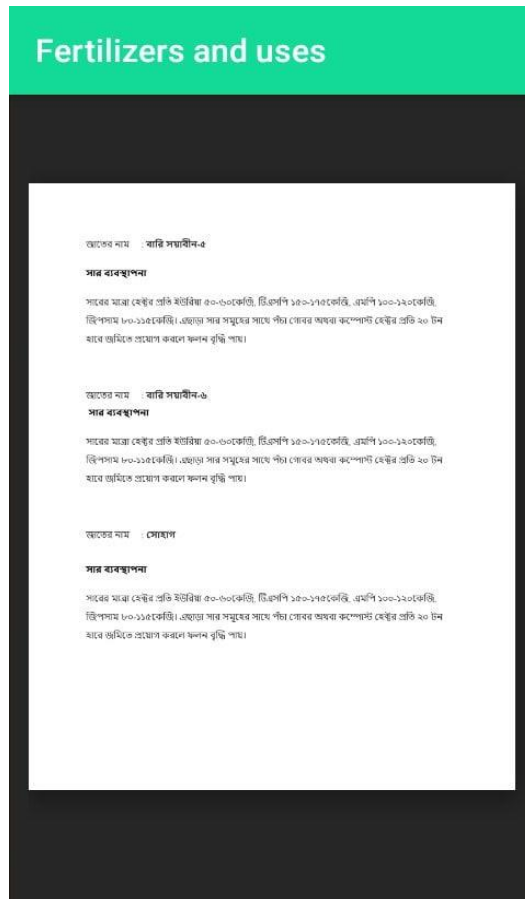


Figure 4.6: Fertilizers and Uses Activity

Weather: Figure 4.7 indicates Weather activity of Modern agri application. When any user clicks on Weather activity, they will know about the current weather based on their location. If the day will sunny in their location then this weather activity will show today is Sunny or if the day will cloudy, then it will show today is cloudy. It also show the Temperature range of that location.



Figure 4.7: Weather

4.3 Back-end Design

Back-end design is those designs which are not seen in the front pages of our Application. We can't see back-end design normally in the front page of our application. Back-end design is how the server works, updates and design data. Adding Database is one of the part of back-end design. All information of an application have to add in database. Developer works for back-end design and only they can works to access the application. In our Modern Agri project we worked a lot for back-end design. We added data in database with firebase Real time database for Authentication. We also added data in data storage with cloud storage. It also works for updates of user interface.

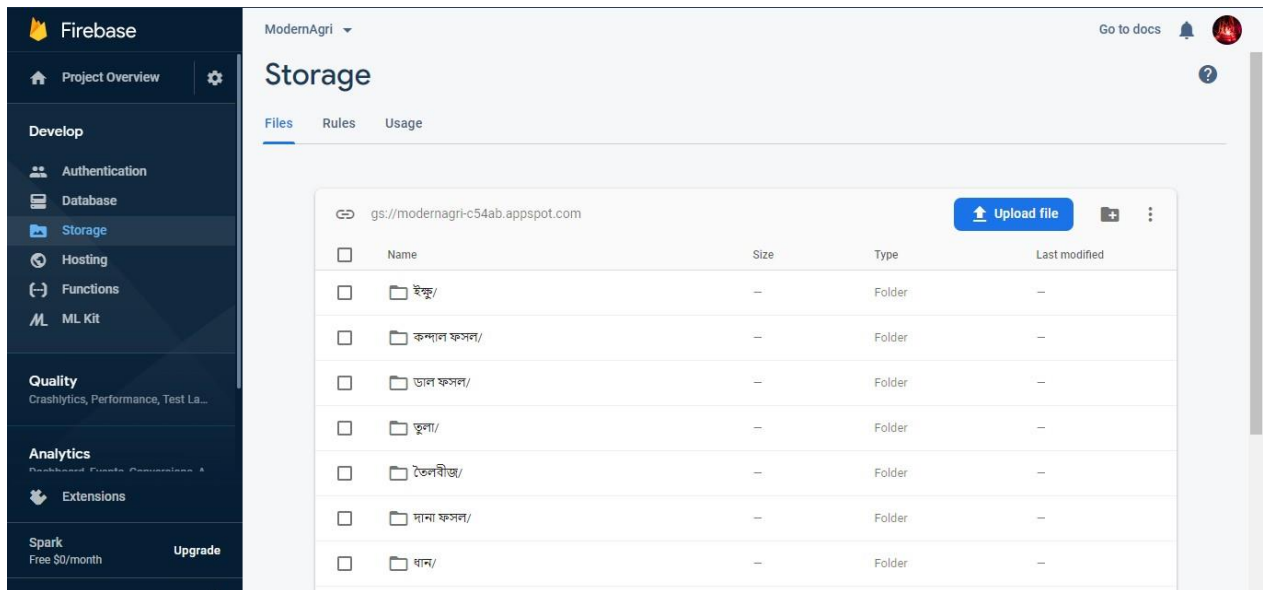


Figure 4.8: Back end (store data set)

Figure 4.8 describes the Data storage in Firebase. This is the back-end part of our project. This figure show the data storage part in firebase data storage. In this database all information are saved which we provide to our users. Any types of data provided by the admin to users will save in this data storage. Admin can access this data at any time.

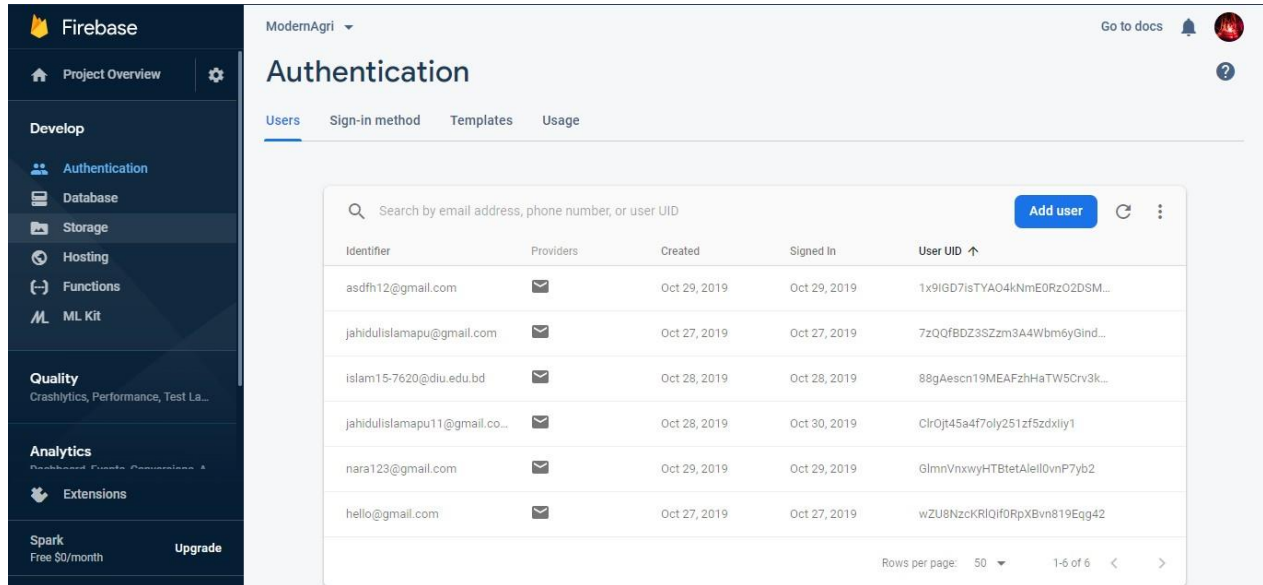


Figure 4.9: Back- end (user authentication)

Figure: 4.9 represents the user Authentication of firebase database. This sites will works for user login and password. If any user signup their username and password for registration then this data remain saved in this storage. If registered user use their username and password and don't match with the saved user name and password which was saved in the storage then the user won't be able to log into the Application.

4.4 Interaction Design and UX

An interaction design is a way that introduce between system and user. To understand the user problem or knowing user requirements we use interaction design. This interaction is not only finding problem of the user goals but also find out the solution of the problem. It also focus user experience to use this application. In our application admin can access all the information and provides direction of using the application. User can understand about their land and soil. All the home contents are user friendly.

For UX we have tested it by some peoples. In those people are said that this application is very helpful and user friendly. When I share all think about my project somebody said that our Application is user friendly but admin can face some problem when there is any updates.

4.5 Implementation Requirements

Implementation Requirement is the process of understanding user expectation and defining user goals.

In this sector developer need to build an Application to fulfill user requirements. We collect information and requirements from user. After working for Application or system we need to test user requirements. If all the requirements will satisfied by the Application then Application will develop successfully. Without implementation of user requirements no application can develop successfully. In our Application we also tried to provide useful information for our users.

Chapter 5

Implementation and Testing

5.1 Introduction

After planning one point will come that is implementation and then testing of any Application. In this session I will discuss about implementation and testing in my project. Testing is require for knowing all the function of the project is working successfully or not.

5.2 Implementation of Database

In android application we store our all data in database. As we use Firebase and Raw data in our application, we constructed a migration table which describes the types of data and the contents of attribute. Here Firebase is the model controller of the database. So we did not use any direct Firebase query for data storage. In the system, the user can input data directly in the database after checking. Authentication on the required hardware then create the database and load the data. Before implementation define the name of database then create the database and tables. In database data will decorate in column. One field can take one categorize data. We can control our data by using code. Admin will able to edit, delete, and insert data in our database.

5.3 Implementation of Front-end Design

It is very challenging to implement an ordinary UI for the users and according to the demand; we have constructed it as simple as possible for designing Application. In this era, almost every people are connected with the internet and they can easily reach to enjoy our providing facilities. In our application we made interface relative and standard using, XML to design, and JavaScript etc. Some features of implementing the front-end design are as follows:

- Contains two types of users like Admin, and Application Users.
- Every user must fill up the required information fields correctly.
- The user can log in using their valid email and password.

- Password recovery process is available on our Application.
- The user must use a unique password for security purposes.

5.4 Implementation of Interaction

For making our Application (Modern Agri), we have constructed two layers. Firstly, the View layer deals with user screen and Database layer deals with storing data. Besides, we have implemented responsive UI, icon, text, link and button for better user experience. We used XML to design different types button using into our application. The System design of our application is user friendly.

5.5 Testing Implementation

For developing an application testing implementation is a process of testing the upcoming implementation of the corresponding system where tester or architect can see test cases and specification, whether it is constructed or not to fulfill user demand. Developer performs integration testing after completing Unit testing. This process verifies the interfaces and interaction between modules. At the time of integrating, there arise a lot of techniques used by us which are very unique.

Table: 5.1 TEST CASE EVALUATION

| Test Case Test | Input | Expected Outcome | Obtained Outcome | Pass/Fail | Test Date |
|----------------|---|--|-------------------------------------|-----------|------------|
| Registration | Name, Phone , select division, select district, Email, Password | Show warning to fill all the required fields | Fields must be field by proper data | Pass | 02/11/2019 |
| Login | Email, Password | Successfully Login | Successfully Login | Pass | 02/11/2019 |
| Password | Incorrect Password or empty field | Show warning | Show warning | Pass | 02/11/2019 |

5.6 Test Results and Reports

The test report is a formal way to express testing results that gives us a clear concept to estimate testing results fruitfully. It is such a document that records data used in our application and other testing information in an organized way. It also defines the environmental or operating condition and makes a difference between test results and test objectives. Whether the system is ready or not ready for implementation is also declared in the test report. We get all valid data set from an evaluation via test report. Like Functionality, Regression, performance, security etc. If the Application fulfilled all the test requirements then it will be able to launch for using. We get all valid data set from an evaluation via test report. We have to run through various types of testing.

Testing types are given below:

5.5.1 Functionality

5.5.2 Regression

5.5.3 Security

5.5.4 Performance

- 5.5.5 Scalability
- 5.5.6 System interoperability
- 5.5.7 Disaster recovery
- 5.5.8 Usability
- 5.5.9 Localization
- 5.5.10 Installation.

If the system passes through all the above types of testing, then it is finally ready to launch to carry out the usability testing benefits.

- 5.5.11 Good quality of the application.
- 5.5.12 The system will be easier for the user.
- 5.5.13 Acceptable application to the user.
- 5.5.14 Better User Interface for interaction.
- 5.5.15 The new user feels comfortable to use the system.

CHAPTER 6

Conclusion and Future Scope

6.1 Discussion and Conclusion

Everyone always wants to find the way to make their life easier and more comfortable. Every day we depend on many android applications for our daily work. So, we have decided to create an android application for saving the user's time in agricultural sites. Our application is totally online based. User need to connect online for using this application. User just have to login in to the application then open project. Admin will be able to access the application at any time. The system will build up communication between user and Admin. It will save time. No need to browsing any other websites for using Modern Agri Application. Final submission of our application language will convert in Bengali it will more easy and comfortable to use for farmers and every sectors user lives in Bangladesh. There is no chance of losing any sort of data during transaction. The system will be come with more upgrades and new feature in future. It will be more upgraded with android version. We will try to upgrades our Application in another sectors related with Agriculture.

6.2 Scope for Further Developments

It is modern technological era. Smartphone is one of the highly demanded blessings of modern technology. As the use of mobile phones is increasing day by day so we have another chance to develop our Application with user demand.

In future we will try to develop our Modern Agri project with more features.

We will add more information about Agricultural sectors.

We will try to make our system more user friendly.

We will try to give more useful Advice by the experts about prevention and cure of crops.

There are a lot of agricultural sectors in our country. Like Farming, Fishing, and many others. As our modern agri application is related to farming we will try to develop this types of Application related with another sectors of Agriculture. We have plan to work on Development of our Application in Future.

APPENDIX

Appendix A: Project Reflection

Appendix introduces us with the projects reflection. Any kinds of group project is very challenging. We had a little chance for group work in University. But we have the opportunity to do many types of works with the group. It helps us to increase our live working activities which will help to shine in future. We had a chance to make an application which will help to easy the Agricultural sites of our Country. It will more helpful for the farmers and any other users.

For every project planning, timing and hard work are very important. Proper plans will help to go in the highest stage of success. Everyone should be given much effort for getting a better success in life.

Appendix B: Related Diagrams

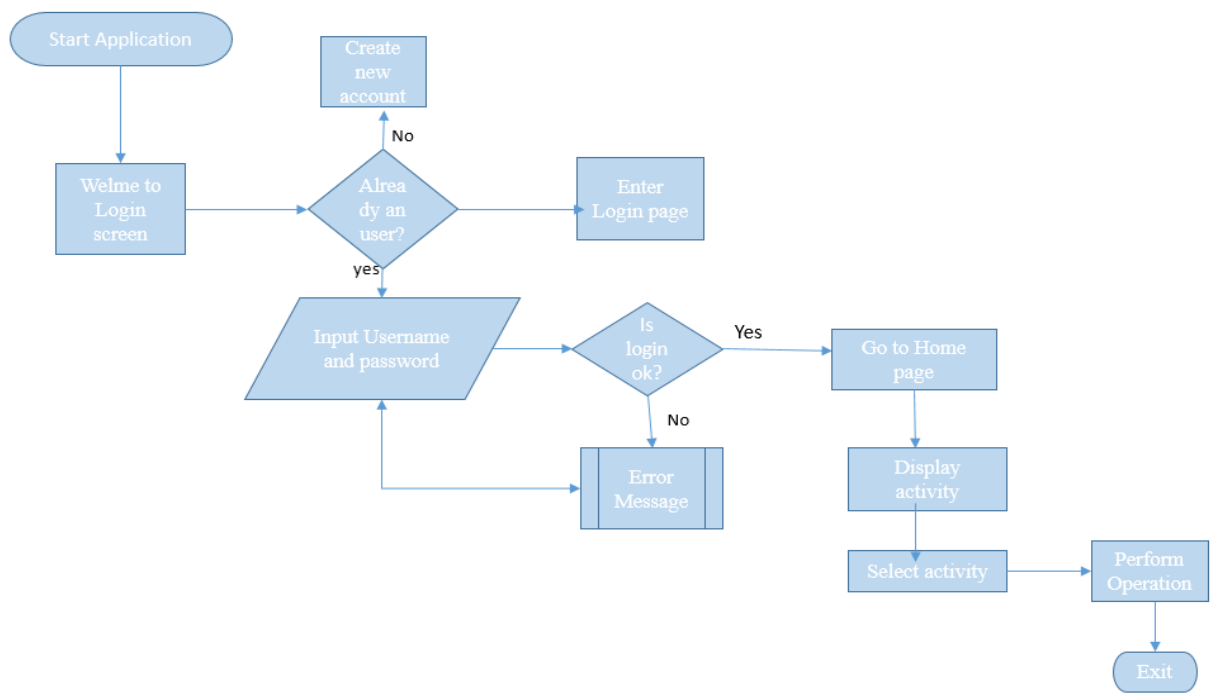


Figure A.1: Flow Chart of Modern Agri Application

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