

# American International University- Bangladesh

CSC 3222: Web Technologies

CO1.1 and CO2.1 Evaluation
Project Report
Summer21-22

Project Title: Agricultural Gain

Section: A

Student Name	Student Id	
MD. SHALIM SADMAN	20-42303-1	
MYSARA NUR TANHA	20-42261-1	
MD. SADIQUR RAHMAN SHAWAN	16-31615-1	
NABIL MOHAMMED	20-42299-1	

#### **Introduction:**

Bangladesh is an agricultural country where 87 percent of rural households rely on agriculture for at least part of their income. But the agriculture of our country still lags behind. Because in our country farmers are not aware of the intelligent technologies much compared to farmers of other countries. As a result, if they face any kind of problem, they do not understand what to do or where to go. Sometimes they have to go a long distance to consult. At the same time, the farmers do not get the proper money for their products as per the original market price. As our country is getting digital and it is the manifesto of the present government to make a digital country, we wanted to make a web application for the farmers as smart devices are very much available now in the rural areas also. This web application might be a one-stop digital solution for farming problems.

### **Background Study**

- 1. <a href="www.farmers.gov">www.farmers.gov</a> : A website for farmers by USDA (United States Department of Agriculture). It is the official website of the government of the United States of America. Here there are a lot of features for agriculture and livestock such as farm loans, pandemic assistance, local service center searching, and many more. Also provides special programs for women farmers, urban agriculture, protection, and recovery.
- 2. <a href="www.agriculture.ny.gov">www.agriculture.ny.gov</a>: It is the official website of the Department of Agriculture and Markets of New York State. It is basically a farmer's market. It provides an online market, shows the local farmer's market, and allows to sell or operate a farmer's market. It manages a list of farmers' markets, farm stands, and mobile markets that take part in Farmers' Market Nutrition Programs (FMNP).
- 3. <a href="www.ais.gov.bd">www.ais.gov.bd</a> : Agricultural Information Service (AIS) is an initiative of the government of the People's republic of Bangladesh based on the concept of e-Agriculture. It provides toll-free hotline numbers for farmers. Also provides detailed information about crops, fruits, spices, flowers, fisheries, and cattle.
- 4. <u>www.thefoodproject.org</u>: They carefully choose locations for their farmers' markets that have access to fresh food. At farmers' markets in Boston and Lynn, The Food Project sells fresh produce from nearby farms.

### **Requirement Analysis:**

#### 1. User Category:

There are 4-types of Users here. They are:

- Farmer
- Agriculturist
- Buyer
- Admin

#### 2. Feature List:

In this project the **Farmer** has the following features:

- Can get farming loans
- Can take advice from agriculturists
- Can sell their products
- Can see the original market price
- Can see nearby markets
- Can contact with other farmers to discuss
- Can get solution from FAQ answers
- Can login
- Can register
- Can read blogs about agriculture
- Can see the list of banks who provides farming loans
- Can see nearby agricultural centers

In this project the **Agriculturist** has the following features:

- Can see the list of farmers who needs solution
- Can contact with other agriculturists to discuss about any problems
- Can answer Frequently Asked Questions (FAQ)
- Can verify the FAQ answers
- Can write blogs about farming
- Can login
- Can register
- Can contact with agricultural centers
- Can suggest which crops will grow better in any geographic area
- Can read the blogs or articles
- Can suggest what type of pesticides can be used in what crops
- Can give a guideline to farmers about what to do in pandemic situation



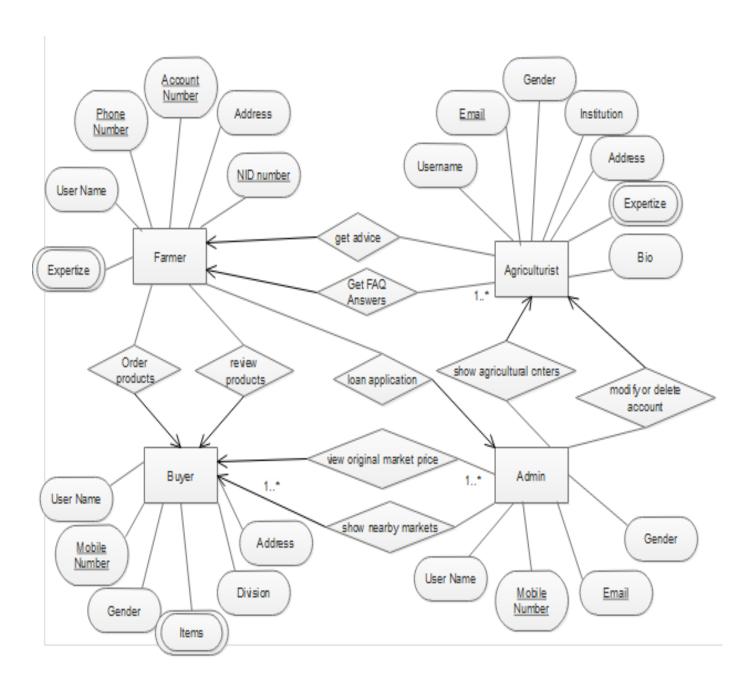
In this project the **Buyer** has the following features:

- Can see the list of products (vegetables, fruits, fishes, dairy products)
- Can order products
- Can see the price of products
- Can see which farmer produces what product
- Can login
- Can register
- Can review the products
- Outsiders can buy the products by delivery service
- Can see the nearby farmer's markets
- Can see the time of the mobile markets
- Can see the original market price
- Can see other buyer's reviews

#### In this project the **Admin** has the following features:

- Login
- Register
- Can provide the list of banks to offer loaning facilities to farmers
- Can accept or deny loan application
- Can view loaning progress/facilities for a loan
- Can specify the list of products for farmers to sell
- Will determine the prices for the products of farmers
- Will provide the list of agricultural centers to help farmers
- Can provide list of markets for farmers to sell their products
- Can provide mobile market schedules for farmers
- Can search account information of users
- Can modify account information of users

### **Design:**



### **Tools Used:**

To develop this project, we have used the following:

- PHP
- HTML
- JASON
- XML
- Txt files

### **System Images against the Specification:**

#### **Home page:**



Home page gives an introduction about our site and allows users to login or create account according to their category. Clicking the text in the images will take them to their sign up page. It is a part of design file and is made by HTML.

### Sign up page:

# Welcome to Farmer's Marketing

Please provide your information properly

Username:
Password:
Mobile Number:
Gender: OMale OFemale OOthers
Items: □Vegetable □Fish □Meat □Milk □Egg □Fruites
Division: Rongpur 🗸
Address:
Click
The following page is the sign up page for the buyers who want to buy fresh foods directly from farmers in the farmer's market. At first they will have to create an account to buy any product. The page will also deverification. Made using PHP and HTML.
Profile page:
Agricultural
Agriculturist's profile:
MD. Shalim Sadman
Email: shalimsadmandipro3@gmail.com Gender: Male Expertizes: Veterinary Agriculture Institute: Bangladesh krishi gobeshona institure Address: dhaka About: I have completed my PHD from London
What can you do for farmers :
See Farmers asking for advice >

The page in the figure is the agriculturist's profile page. Here user can see their information what is shown using session. Also they can choose the action they want to do. In the following figure, there are three



Contact with other Agriculturists >

features, one will show the farmer's list, one will show the agriculturist's list and one will show the Frequently Asked Questions which are Stored using XML. All these features are hyperlinks which will take to a different page.

Farmer's list page:



Agriculturist : MD. Shalim Sadman.

#### List of Farmers asking for advice:

Vame: Rohim mia phone:01895467
Name: abddul kuddus phone:01793627
Vame: abdul jobbar phone:01893671
Name: Rohim mia phone:01841617
Vame: abddul kuddus phone:01893676
Name: abdulah mia phone:01993637
Vame: shukur mia phone:01893673
Vame: akkas kuddus phone:01893673
Vame: abdul hayat phone:01993672

The page shows the list of farmers who have created account in this website. It shows by reading the txt file where the farmer's information gets saved while registration.

### **Impact of this Project:**

In our country, if farmers face any kinds of problems regarding their crops, they do not understand where to contact. Our project will help them to contact agriculturists or veterinary specialists. Sometimes farmers need money to cultivate but they find it difficult to manage it. Even if they can hardly manage loans, they have to pay a huge amount of interest. Our project will help them to take loans and microcredits with a negligible amount of interest. Usually, the farmers sell their products to wholesalers and they sell them to the consumers. As a result, sometimes it is seen that farmers are not getting the proper price as the market price. Even the customers also want farm-fresh food which they sometimes may not get in this process. Our project will allow the customers to buy products directly from the farmers so that the farmers get proper money and the buyers get fresh food.

### **Limitations and Possible Future Improvements:**

As we do not have the proper idea about the database, we had to use XML, JSON, and text files as alternatives. Due to limitations of our knowledge, we could not develop all the features that we mentioned which we will develop later. It was not possible to follow a well-structured operational architecture due to the limitation of time. We failed to add a messaging feature in the contact sections. Most of our farmers do not understand English, so the project should have been made in the native language.

In the future, we may add the database and view the data in a more user-friendly way. We might develop our design part to make the user interface better. We may add more features to our project such as disaster management, preserving facility, agricultural instruments and insecticides buying or selling facility, transport facility of crops, land selling, or land renting facility, and farmer's insurance.

CO1.1 and CO2.1Evaluation: Project Report Evaluation							
Project Proposal (5)	Background Study (5)	Requirement Analysis (5)	Entity Diagram (5)	System Images against the Specification (5)	Total (25)		