<u>Project name : Farm-Ware</u>

Team : Agronomists

<u>Team members :</u>

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<u>Course :</u> CSE499

<u>Sec. :</u> 11

Farm-Ware

Problem Statement:

Bangladesh is an agricultural country. But maximum number of our farmers are uneducated. So they can't access the facility of the digital services related to agriculture using smart devices. Project Farm-Ware is based on this context to provide information collected by hardware tools and served by easy interface presenting the information only. Farm ware is also included with website and smartphone application to spread the collected information.
The hardware part is going to build by using micro controller and sensors. The information will be about the temperature, soil moisture, humidity, water flow and water level, pesticides, monitoring the plant growth etc.
The information will be presented on spot by the device. Information will also be stored in our database.
To show the information we will use website and smartphone applications

Objectives:

✓ This will help to look over the crops from anywhere.

Approach:

Front-end plan

A total of 8 page-templates in plan
1. Main page
2. Search result page
3. Location page
4. Agricultural data page
5. Advice page
6. Register/login page
7. Farmer profile creation page (all steps 1,2,3 as one)
8. Agricultural officer's details page

Map layout on search results will be visible and this will use Google API.

Back end development

1. Account Creating, Password Recover:
      a. Sign up form, verification by mobile or email.
      b. Login
      c. Forgot Password
      d. MySQL Database
      e. Google sign in

2. Profile Management:
      a. DB plan design
      b. User Profile
      c. Profile of agricultural officer
      d. Others

3. Searching facility:
      a. Location based
      b. Data search

<u>Competitive advantage:</u>

This will help the farmers to look after their crops from their home. They can see the crop growth and also get the respected data's.

Team Dynamics:

	Hardware Part (Arduino)		
1	Temperature sensor	will determine the temp. of an area	Shohaib Islam
3	Humidity sensor	will determine the humidity of the air	Shohaib Islam
4	Water level	it will determine the water level	Tahmim
5	Water flow	determine how much water will flow	Tahmim
6	Soil moisture	determine the moisture of the soil	Fahad Hassan
7	Rain Drop	determine the amount of rain	Jubayer
8	Raspberry camera image	Monitoring the plant growth	Fahad hasan
	Software Part		
8	Starting page (Android app)	the opening page of the app	Jubayer
9	Login page	login will be required for a user profile	Fahad Hassan
10	Registration page	to register a new profile	Tahmim
11	Main page	it will contain the info's	Jubayer
12	Google Location	it will take the location	Jubayer
13	Google API	to access the google map	Tahmim
14	Database	will store the values from sensors	Shohaib Islam

Project Timeline:

SL	Deliverable	WEEK					Man-Week
		4	8	12	16	20	
1	Front end development						10
2	Hardware implementation						10
3	Database management						6
4	Testing & debugging						8
5	Deployment and final release						4
Total duration							18