Project Proposal

Project Title: Internet of things (IOT) based Agriculture management System

1.1. Overview

1.1.1. Background

The major challenges related to agriculture and food security in Bangladesh are:

- The curse of poverty, food insecurity and malnutrition.
- Degradation of natural resources.
- Low agricultural productivity and limited modernization and/or diversification.
- Weak research extension linkage and technology.

1.1.2. Objectives

Agriculture plays a dominant role in the growth and stability of the economy of Bangladesh and more than three quarters of the total population in rural areas derive their livelihood from the agricultural sector. The overall objective of this study/report is to formulate development options for interventions to promote inclusive growth by promoting faster economic growth – transformational by moving from the present situation to one of high productivity and commercialization. The specific objectives were to:

- Assess the current productivity status of Bangladesh agriculture and its contribution to growth and poverty reduction.
- Assess the structure of agriculture, its competitiveness, commercialization and value chain development.
- Assess vulnerability in Bangladesh agriculture due to climate change and investment needs for adaptation and mitigation to agriculture.
- To identify challenges of Bangladesh agriculture.
- Suggest interventions for supporting sustainable agricultural development to promote poverty reduction, employment generation and enhance food security in Bangladesh.

1.1.3. Scope

This will be an Agriculture Info and fully automation system against manual system. In this system cultivators will be able to get information about any kind of crops. There will be Information for those who have problems with cultivating and who doesn't have scientific knowledge about agriculture. Those people who don't have scientific knowledge must submit their National ID card Number otherwise the cultivators will not be able to register. After submitting the information, a request will be sent to the specific person who is responsible for that ward. After this, a specific person will check the information and if the responsible person confirms/accepts the request then a notification will be sent to the person's email/phone. Otherwise, those cultivators who do not use the internet will be able to do registration. They will go to the responsible person of their own Union Agriculture Office and the authority will give them information. The responsible person will be able to register them without sending any request. For this reason, a responsible person must be logged in. Then the main part of our system's soil scanner will detect the form of soil, Thus we can decide which crop is more suitable for that particular kind of soil. Management will be able to generate their ideas.

1.1.4. Dependencies and Risks

The user must have web access in order to use the system. The main risk behind implementing the project is security. If somebody hacks the system then it will be a total disorder. So, during development it will be one of our major concerns. Another concern is having common bugs such as the common users are having the same functionalities as the doctors or system admin.

1.2. Project Delivery

1.2.1 Deliverables

The following contents will be delivered with the project:

- Project CD

  i. Project Demo

  ii. User manual along with Tutorial

- Documentation

1.2.2 Timescales

The time frame for implementing the project is given in Figure 1.2.1.

1.2.3 Work Distribution

The work distribution of the project is given in Table 1.2.1.

1.2.4 Project Resources

The resources required to finish the project is given in Table 1.2.2.

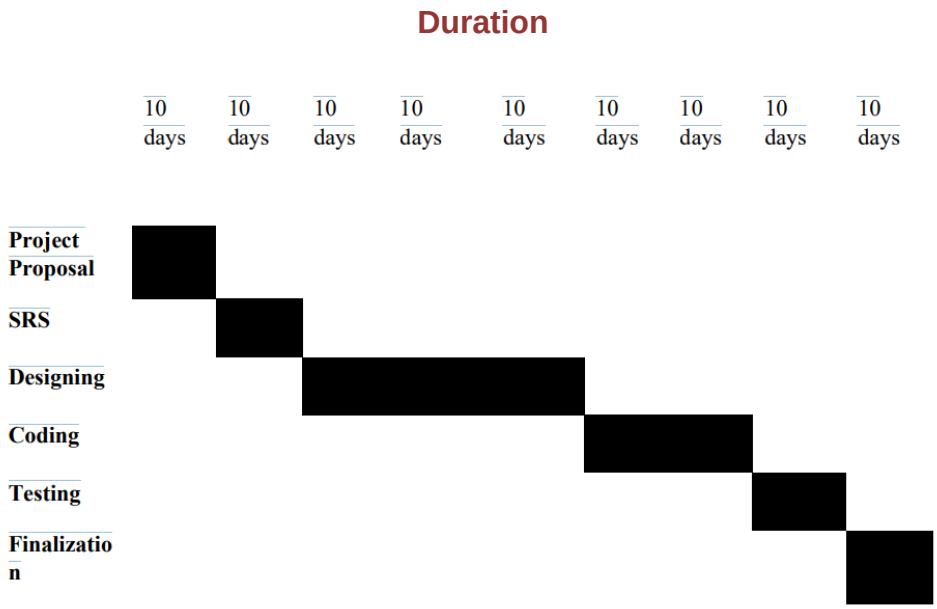

Figure 1.2.1: Time frames for project implementation

Project Proposal	Belayet hossan	10 days
Software Requirement Specification	Belayet hossan	10 days
Software Design	Belayet hossan	20 days
Coding	Belayet hossan	30 days
Software Testing	Belayet hossan	10 days
Project Finalization	Belayet hossan	10 days

Table 1.2.1 Work Distribution

Hardware Requirements Processor RAM Hard Disk Space Intel P-IV system 512 Mb or higher 10 GB or higher Software Requirements Operating System Database Operating System: Windows 2000 Professional Environment: Visual Studio SQL Server 2008

Hardware Requirements		
Processor	RAM	Hard Disk Space
Intel P-IV system	512 Mb or higher	10 GB or higher

Software Requirements		
Operating System	Database	
Operating System	Windows 2000	
Professional		SQL Server 2008
Environment	Visual Studio	

Table 1.2.2 Project Resources

1.3. References

https://www.researchgate.net/publication/339875029_Smart_agriculture_management_system_using_internet_of_things