

IBM Report (Nalaiya Thiran)
IOT based Smart Farming

SUBMITTED BY

VARUN PRASAD. K	(113219041128)
RAMAKUMAR. B	(113219041093)
SOMANATH. S	(113219041113)
LAKSHMI NARAYANAN.VR	(113219041055)
PAVAN KUMAR. VV	(113219041081)

PROPOSED SOLUTION FIT AND
ARCHITECTURE

Project Design Phase-I

Proposed Solution Fit and Architecture

Date	23th September 2022
Team ID	PNT2022TMID23529
Project Name	IOT Based Smart Farming
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none"> * The water scarcity problem is solved. * The animal invading is prohibited. * Temperature is maintained. * Humidity is checked.
2.	Idea / Solution description	<p>* Now a days farmers are facing many problems in agriculture, some of the problems to be solved are:</p> <p>* To minimize the usage of water The soil temperature and humidity can be detected ,if there is a deviation from the normal circumstance the water will be sprinkled from sprinkler. When once again it meets the normal circumstances. The sprinkler will stop sprinkling the water.</p> <p>* Animals invading The PIR sensor is used,in which it detects the motion of the animals or other living beings and it will intimate the farmers by an alarm sound and the minimum electric current is released.</p> <p>* Temperature The temperature can be maintained by monitoring. When the temperature is low, heat bulb is used to increase the temperature. When the temperature is high, an outer cover is used to prevent the heat.</p> <p>* Humidity The humidity sensor is used to maintain the moisture content in soil.</p>
3.	Novelty / Uniqueness	<p>* Hardware wise Three tanks are used for collecting rain water. Two tanks are used for present and third tank is used for the future use.</p>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> * The cost for implementation is low. * It saves time and energy. * The failures of any physical components can be easily replaced.

5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> * Approval from the government. * Extra new features <ul style="list-style-type: none"> 1) Animal invading sensor. 2) Water Storage. 3) Life span of the component is increased. * Simple design in implementation. * Cost efficiency and affordable.
6.	Scalability of the Solution	<ul style="list-style-type: none"> * It takes 3 to 4 months to finish the project.