

Project Design Phase-I

Proposed Solution

Date	19 September 2022
Team ID	PNT2022TMID27433
Project Name	Smart Farmer - IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

Proposed Solution

S.No.	Parameter	Description
1.	Problem Statement	The requirement of water for irrigation needs to be supplied in precise amount for proper growth of crops. Excess or less water can lead to poor growth and overall health.
2.	Idea/Solution description	These problems can be overthrown by using the advanced IoT system for irrigation.
3.	Novelty/Uniqueness	The system will monitor the water level of the field and also the weather parameters of the particular location.
4.	Social Impact/Customer Satisfaction	The farmer/customer can be able to assess the water level of the field through a mobile application and the weather parameters to know whether it will rain or not.
5.	Business Model	Key Partners: <ul style="list-style-type: none"> • Farmers • Chemical Factories

		<p>Key Activities:</p> <ul style="list-style-type: none"> • The system will monitor the water level of the field. • It will also report the weather conditions of the location which is efficient for plant growth. <p>Value Proposition:</p> <ul style="list-style-type: none"> • The Smart Irrigation System will reduce the workload of the farmer. • It will be useful to preserve the excess water which can be used for growing other crops. • The system can also be used in some chemical manufacturing factories in which the leakage of chemicals can be detected using the level indicator. <p>Cost Structure:</p> <ul style="list-style-type: none"> • Cost estimation: <ul style="list-style-type: none"> ➤ The estimates will vary depending upon the cost of the sensors and the software used. • Cost budget: <ul style="list-style-type: none"> ➤ The budget will be set based on the requirements of the Smart Irrigation system. • Cost Control: <ul style="list-style-type: none"> ➤ The cost can be reduced by using efficient and low-cost sensors.
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6.	Scalability of the Solution	The Smart Irrigation System can send the information to the cloud, so that it can be viewed from anywhere which makes it an ideal system for agricultural needs.
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