

Project Design Phase-I
Proposed Solution Template

Date	17 October 2022
Team ID	PNT2022TMID04701
Project Name	Smart Farmer-IOT Enabled smart farming application
Maximum Marks	2 Marks

Proposed Solution Template:

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

S.N o.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<p>The primary issue faced by the farmers nowadays is knowing the characteristics of their soil like soil moisture, humidity, temperature, deficiency of minerals, etc.</p> <p>Another problem is that supplying water to the field by monitoring its moisture content for which they need to stay near the fields all the time</p>
2.	Idea / Solution description	<p>We can use sensors to monitor the temperature, humidity, moisture of the soil so that he can plant the crop accordingly to that.</p> <p>The lack of certain minerals in the soil so that it will be helpful for the farmers to use appropriate fertilizers and manures to improve the yield of the crop.</p> <p>Sensors can be used to check the water content in the field and pump the water from the well using the motor</p> <p>All these things can be monitored by the farmer from anywhere else through his phone and he can work accordingly</p>
3.	Novelty / Uniqueness	<p>The data collected by the sensors will be shared to the cloud and then to the mobile phone through the internet and the farmer can his decisions.</p> <p>If the field is dry the sensor which monitors the moisture content of the soil will send the information to his phone and he can switch on the motor to pump the water.</p>
4.	Social Impact / Customer Satisfaction	<p>First of all it will save his time and also reduce the labour cost upto a certain level.</p> <p>By planting the right crop at the right time he can improve the yield of the crop which would increase his income.</p>

		<p>He can get good user experience through IOT and encourage the other farmers to use it aswell so the number the users would increase.</p> <p>As a result the applications of IOT would also extend towards agriculture.</p>																				
5.	Business Model (Revenue Model)	<p>We can monitor the number of users on monthly or yearly and add extra features to it to increase the revenue.</p> <table><tr><td></td><td>2022</td><td>2023</td><td>2024</td><td>2025</td></tr><tr><td>Number</td><td></td><td></td><td></td><td></td></tr><tr><td>Of</td><td></td><td></td><td></td><td></td></tr><tr><td>Users</td><td></td><td></td><td></td><td></td></tr></table>		2022	2023	2024	2025	Number					Of					Users				
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6.	Scalability of the Solution	<p>It is how far the system can improve the present situation like to increase the sensors and actuator used while consuming the time that is to develop the technology</p>																				