

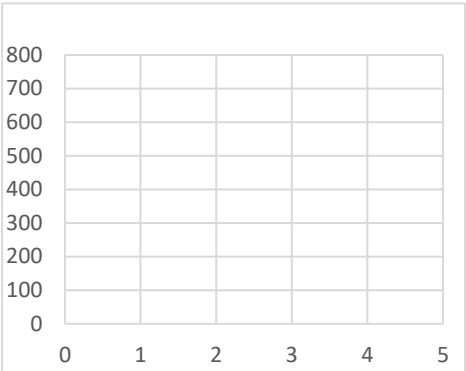
Project Design Phase-I
Proposed Solution Template

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| Date | 24 September 2022 |
| Team ID | PNT2022TMID14367 |
| Project Name | Project – Smart Farmer-IoT Enabled smart Farming Application |
| Maximum Marks | 2 Marks |

Proposed Solution Template:

| S.No. | Parameter | Description |
|-------|---|--|
| 1. | Problem Statement (Problem to be solved) | <ul style="list-style-type: none">• CLIMATIC CONDITIONS : The important drawback and problem faced by the farmers are the frequent changes in the climate.• PRECISION FARMING : The farm is covered by a vast area. It is a difficult task for the farmers to take care the entire farm and note the changes in each and every particular areas.• MONITORING AND WATER REQUIRMENTS : It's a difficult task for the farmer to monitor the cattle in all the areas. Water requirements are different in each places of the farms. If a particular place is watered completely, in case of excess water, the crops are affected and wasted. Hence it must be monitored with excess care. |
| 2. | Idea / Solution description | <ul style="list-style-type: none">• With the help of IOT sensors, the real time climatic |

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| | | <p>conditions and monitoring can be done precisely .</p> <ul style="list-style-type: none"> • The Data collected by sensors, In terms of humidity, temperature, moisture, and dew detections help in determining the weather pattern in Farms. So cultivation is done for suitable crops. |
| 3. | Novelty / Uniqueness | <ul style="list-style-type: none"> • IoT sensor nodes collect information from the farming environment, such as soil moisture, air humidity, temperature, nutrient ingredients of soil, pest images, and water quality, then transmit collected data to IoT backhaul devices. • It helps the farmer to operate the motor from anywhere. |
| 4. | Social Impact / Customer Satisfaction | <ul style="list-style-type: none"> • Reduces the wages for labors who work in the agricultural field. • It saves a lot of time. • IoT can help the each work to be completed precisely. • Easily identify maintenance needs, build better products. • The usage of water will be limited and also used only when needed.It reduces the wastage of excess water. • IoT can also help e-commerce businesses thrive and increase sales. • It make a wealthy society |
| 5. | Business Model (Revenue Model) | Revenue (No. of Users vs Months) |

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|----|-----------------------------|---|
| | | <div> <div>User</div>  <div>Months</div> </div> |
| 6. | Scalability of the Solution | <p>Scalability in smart farming refers to the adaptability of a system to increase the capacity, for example, the number of technology devices such as sensors and actuators, while enabling timely analysis.</p> |