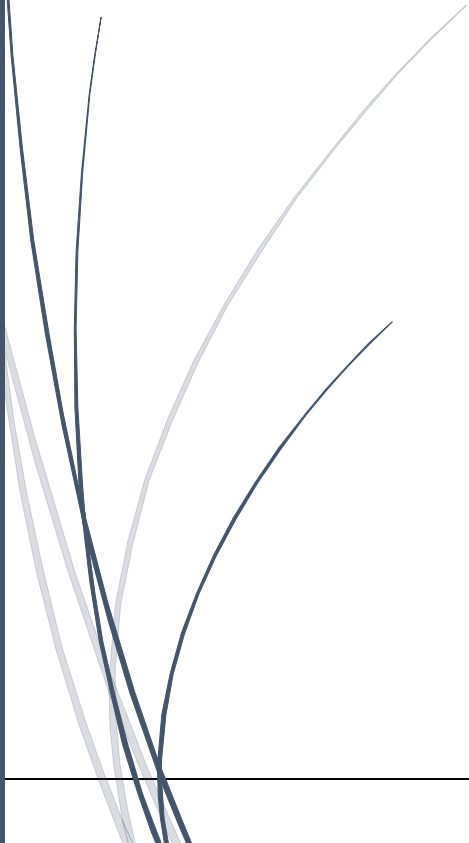


LITERATURE

IBM



SURVEY

SMART FARMER – IOT

ENABLED SMART FARMING APPLICATION

Team Details

Team Id :- PNT2022TMID17065

1. R .PRAVEEN KUMAR
2. N.SANJAY
3. E.PARASURAMAN
4. N.VIGNESH

Literature Survey on “Smart Farmer – IOT Enabled Smart Farming Application”

Reference	Technologies used	Advantages	Disadvantages
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[1]	Microcontroller: CC3200 Chip, MCU Communication Technologies: MMS, Wi-Fi Module Sensors: Camera, Temperature Sensor, Humidity Sensor	<ul style="list-style-type: none"> □ Sends the information about humidity and temperature in air of field to farmer. □ Uses MMS technology to send captured images. 	<ul style="list-style-type: none"> • MMS adds extra cost • No automatic support system
[2]	Microcontroller: ATMEGA328P Cloud server: Adafruit Server Communication Technologies: Wi-Fi Sensors: Soil Moisture Sensor	<ul style="list-style-type: none"> □ Controlling the actions of motor pump (ON/OFF) based on the threshold value. 	<ul style="list-style-type: none"> • No sprinkles • No smart drains • No automatic support system
[3]	Microcontroller: Arduino Cloud server: ThingSpeak Sensors: Light Intensity, pH, Electrical Conductivity, Water Temperature, Relative Humidity	<ul style="list-style-type: none"> □ Hydroponic System □ Bayesian Network Model □ System has manual and automatic mode 	<ul style="list-style-type: none"> □ Extremely computationally expensive model
[4]	Microcontroller: Arduino UNO Cloud server: ThingSpeak Communication Technologies: Wi-Fi Sensors: Water Level Sensor, Moisture Sensor	<ul style="list-style-type: none"> □ Farmers can monitor their fields remotely □ Irrigation control system 	<ul style="list-style-type: none"> □ Lack of automated decision support system
[5]	Microcontroller: Arduino Sensors: Temperature Sensor, Humidity Sensor, Soil Moisture Sensor	<ul style="list-style-type: none"> □ Data regarding sensors stored on server and user can view via GUI application. 	<ul style="list-style-type: none"> • Decision making is rely on user or farmer • No automatic support system

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