Smart Agriculture System

Made at:

SmartInternz

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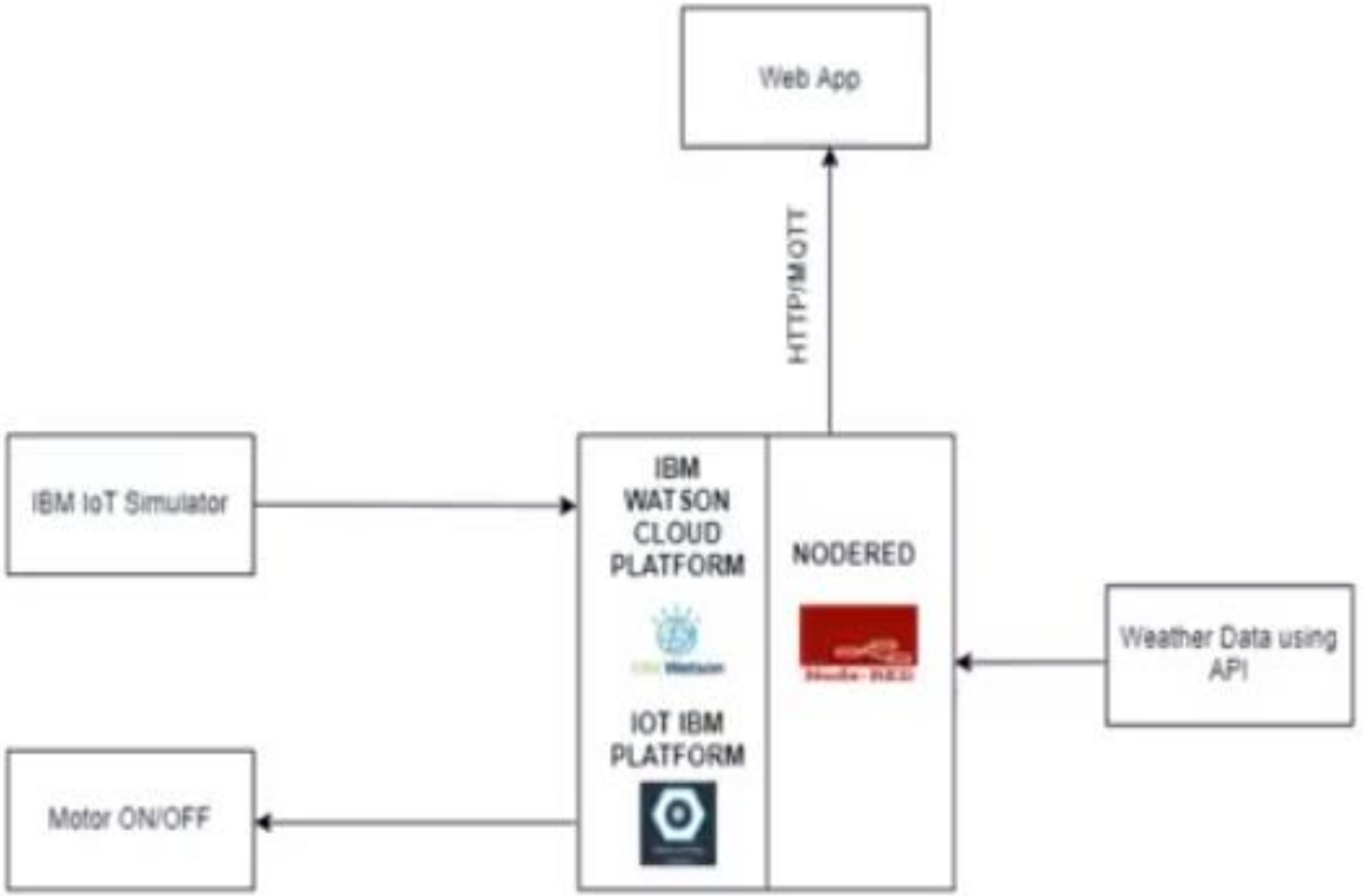
PROJECT DESCRIPTION

- Smart Agriculture System based on IoT can monitor soil moisture and climatic conditions to grow and yield a good crop.
- The farmer can also get the realtime weather forecasting data by using external platforms like Open Weather API.
- Farmer is provided a mobile app using which he can monitor the temperature,humidity and soil moisture parameters along with weather forecasting details.
- Based on all the parameters he can water his crop by controlling the motors using the mobile application.
- Even if the farmer is not present near his crop he can water his crop by controlling the motors using the mobile application from anywhere.
- Here we are using the Online IoT simulator for getting the Temperature,Humidity and Soil Moisture values.


Web App
HTTP/MQTT
IBM IoT Simulator
IBM WATSON CLOUD PLATFORM
NODERED
IOT IBM PLATFORM
Weather Data using API
Motor ON/OFF

FUTURE SCOPE

- The smart agriculture system can help farmers to save electricity and water consumption as it allows farmers to control their water motor through their web app.
- If they get accurate weather conditions of their field , they can critically analyse the needs of their crop and accordingly fulfil it, leading to increased crop yield hence increasing their profit.
- IoT sensors capable of providing farmers with information about crop yields, rainfall, pest infestation, and soil nutrition are invaluable to production and offer precise data which can be used to improve farming techniques over time