Project design phase-II

Data flow diagrams and user stories

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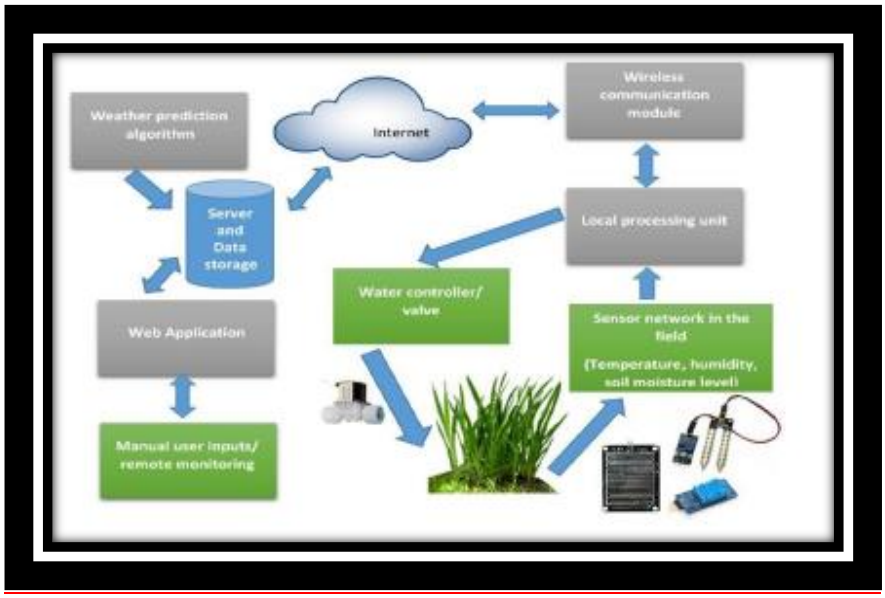
Team id	**PNT2022TMID48172**
Project name	Project – smart farming- IOT enabled smart farming application
Maximum marks	**4 marks**

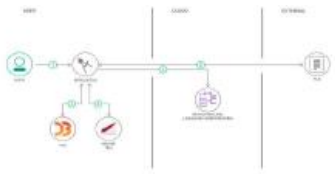
Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is store

Example:

DFD LEVEL





1. User configures credentials for the Watson Natural Language Understanding service and starts the app.
2. User selects data file to process and load.
3. Apache Tika extracts text from the data file.
4. Extracted text is passed to Watson NLU for enrichment.
5. Enriched data is visualized in the UI using the D3.js library.

User stories ; Use the below template to list all the user stories for the product

User type	Functional requirment	User story number	User story/task	Acceptance criteria	priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	high	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	high	Sprint-1
aministrator		USN-3	As a user, I can register for the application As a user, I can log into the application by entering email & password As a user once view the manage modules this describes the Manage system Admins and Manage Roles of User and etc.		medium	Sprint-1 Sprint-2

• The different soil parameters temperature, soil moistures and then humidity are sensed using different sensors and obtained value is stored in the ibm cloud.

• Aurdino UNO is used as a processing Unit that process the data obtained from the sensors and whether data from the weather API.

• NODE-RED is used as a programming tool to write the hardware, software and APIs. The MQTT protocol is followed for the communication.

• All the collected data are provided to the user through a mobile application that was developed using the MIT app inventor. The user could make a decision through an app, weather to water the crop or not depending upon the sensor values. By using the app they can remotely operate to the motor switch.