

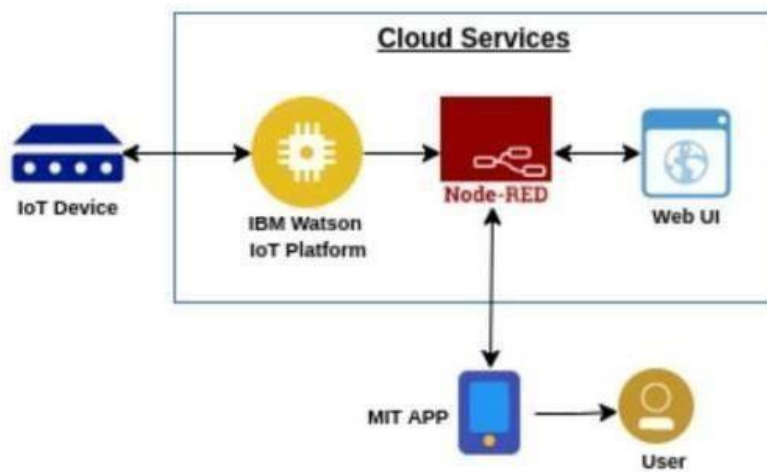
Data Flow Diagram & User Stories

Date	5 Nov 2022
Team ID	PNT2022TMID43020
Project Name	Smart Farmer-IoT
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data flow diagram (DFD) is a common visual representation of how information moves through a system. A clean and understandable DFD

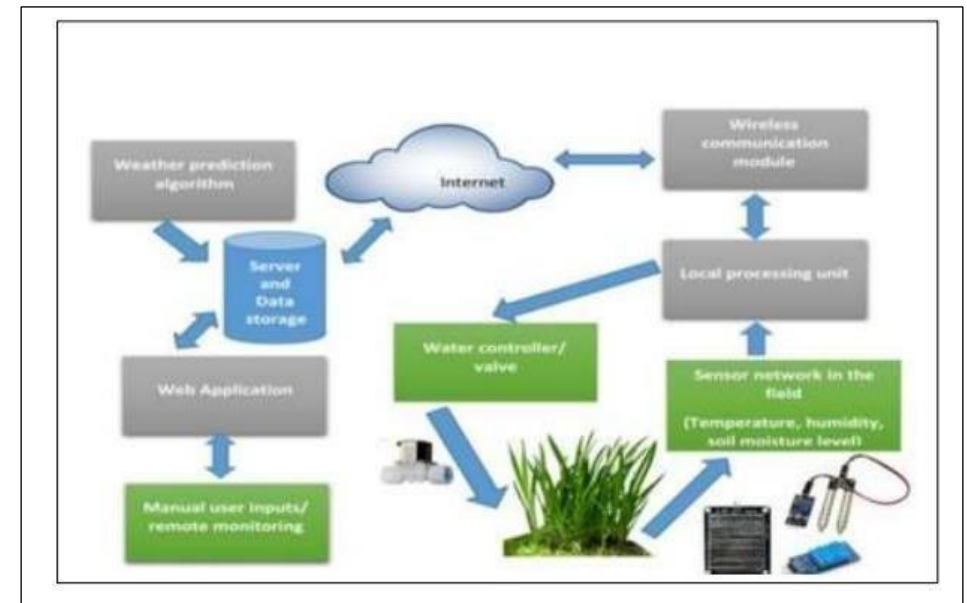
Example: DFD Level 0 (Industry Standard)



can graphically represent the appropriate quantity of the system need. It displays how information enters and exits the system, what modifies the data, and where information is kept.

Example: (Simplified)

- Using various sensors, the various soil parameters, including temperature, moisture content and humidity are measured. The results are then stored in the IBM cloud.
- The Arduino UNO is utilised as a processing unit to process the data from the sensors and weather API.
- To write the hardware, software, and APIs. NODE-RED is employed as a programming tool. In order to communicate, the MQTT protocol is used.
- A mobile application created with MIT App Inventor makes all the collected data available to the user. Depending on the sensor results, the user might decide whether or not to irrigate the crop using an app. They can control the motor switch remotely by utilising the app.



User Stories

User Type	Functional Requirement	User Story	User Story / Task	Acceptance criteria	Priority	Release

	(Epic)	Number				
Customer (Mobile user)	Registration	USN-1	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	Will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
		USN-3	Can Register for the application through Gmail		Medium	Sprint-1
	Login	USN-4	Can Log into the application by entering email & password		High	Sprint-1
	Dashboard					
Customer (Web user)						