**Project Design Phase – 2**

**Data Flow Diagram & User Stories**

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| Date | 14.10.2022 |
| Team ID | PNT2022TMID41951 |
| Project Name | SMARTFARMER – IOT ENABLED SMART FARMING APPLICATION |
| Maximum Marks | 4MARKS |

**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 enter and leaves the system, what changes the information, and where data is

* The different sensors used to measure soil moisture , temperature ,humidity , weather and stored the data in IBM CLOUD
* Arduino 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 plan 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 which is watering the plant.

**User Stories**

Use the below template to list all the user stories for the product.

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **User Type** | **Functional**  **Requirement (Epic)** | **User**  **Story**  **Number** | **User Story / Task** | | **Acceptance criteria** | **Priority** | **Release** |
| Customer (Mobile user) | Registration | USN-1 | As a user, I can register for application by entering my email, password, and confirming password. | the  my | 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 |
|  |  | USN-3 | As a user, I can register for the application through Facebook |  | I can register & access the dashboard with Facebook Login | Low | Sprint-2 |
|  |  | USN-4 | As a user, I can register for the application through Gmail |  |  | Medium | Sprint-1 |
|  | Login | USN-5 | As a user, I can log into the  application by entering email & password |  |  | High | Sprint-1 |
|  | Dashboard |  |  |  |  |  |  |
| Customer (Web user) |  |  |  |  |  |  |  |
| Customer  Care  Executive |  |  |  |  |  |  |  |
| Administrator |  |  |  |  |  |  |  |
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