**Project Design Phase-II**

**Data Flow Diagram & User Stories**

**Data Flow Diagram of Smart Farming – IOT Enabled Smart Farming Application**

**ARDUINO**

PH SENSOR

CLOUD

ULTRASONIC SENSOR

WIFI

TEMPERATURE AND HUMIDITY SENSOR

GSM

NODE RED

SOIL MOISTURE SENSOR

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JJIJ OPEN WEATHER API

POWER SUPPLY

**USER STORIES:**

| **User Type** | **Functional Requirement (Epic)** | **User Story Number** | **User Story / Task** | **Acceptance criteria** | **Priority** | **Release** |
| --- | --- | --- | --- | --- | --- | --- |
| Farmers | Registration | US1 | 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 |
|  |  | US2 | 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 |
|  |  | US3 | As a user, I can register for the application through Gmail | I can access my account through email | Medium | Sprint-1 |
| Farmers | Login | US4 | As a user, I can log into the application by entering email & password |  | High | Sprint-1 |
| Farmers | Model setup | US5 | As a user, I can setup the model in the field with help of guide | I can setup the model through the guide assistance | High | Sprint-2 |
|  |  | US6 | As a user, I setup the model through with help of instructions given in manual | I can setup the model with the help of instruction in manual | medium | Sprint-2 |
| Farmers | Internet access | US7 | As a user, I buy internet access from the provider | I buy internet access from the provider | High | Sprint-2 |
| Farmers | Power supply | US8 | As a user , I ensure the proper power supply for the setup | I ensure the sufficient power supply for the setup | High | Sprint-2 |
| Farmers | Irrigation control monitoring | US9 | As a user, I check the irrigation level through the smart farming application | I monitor the water level in the soil through the application | High | Sprint -2 |
| Farmers | Weather control monitoring | US10 | As a user, I check the weather condition through the application | I check the condition of the weather and take the prior actions | High | Sprint -2 |
| Farmers | Animal invasion monitoring | US11 | As a user, I get a alert system if the animals enter into the field | I get the alert sound if there is invasion of animals | High | Sprint -2 |
| Farmers | Soil monitoring | US12 | As a user, I get live details of the soil regarding the condition of the soil | I get live details of the soil regarding the condition of the soil from the application | High | Sprint -2 |
| Application Administrator | Functioning of application | US13 | As a user, I check the errors in application | I check whether the application does not make any problem | Medium | Sprint 1 |
| Application Manager | Monitoring of Application | US14 | As a user, I check well-functioning of the application | I check the proper functioning of application | High | Sprint -2 |