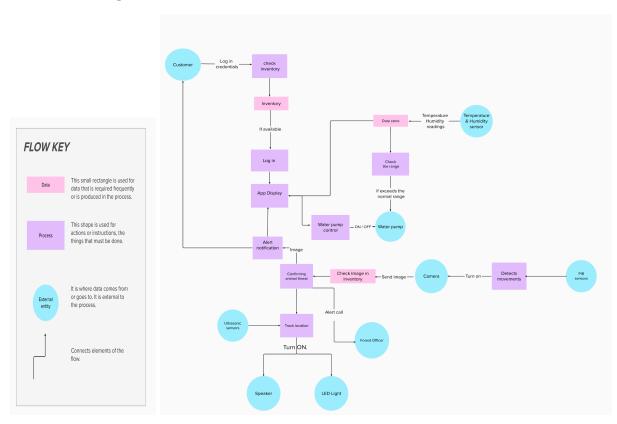
## **Project Design Phase-II**

## **Data Flow Diagram & User Stories**

| Date          | 16 October 2022                        |
|---------------|--|
| Team ID       | PNT2022TMID38540                       |
| Project Name  | IOT BASED SMART CROP PROTECTION SYSTEM |
| Maximum Marks | 4 Marks                                |

## **Data Flow Diagrams:**



## **User Stories:**

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

| User<br>Type           | Functional<br>Requirement<br>(Epic) | User<br>Story<br>Number | User Story / Task  | Acceptance criteria  |
|------------------------|-------------------------------------|-------------------------|--|--|
| Customer (Mobile user) | Registration                        | USN-1                   | As a user, I can register for<br>the application by entering<br>my email, password, and<br>confirming my password. | I can access my account / dashboard                                |
|                        |                                     | USN-2                   | As a user, I will receive confirmation email once I have registered for the application                            | I can receive confirmation email & click confirm                   |
|                        |                                     | USN-3                   | As a user, I can register for the application through Gmail  |  |
|                        | Login                               | USN-4                   | As a user, I can log into the application by entering email & password   | I can access my account / dashboard                                |
|                        | Dashboard                           | USN-5                   | As a user,I can view all activities in the farm from dashboard   | I can monitor the farm   |
|                        | Weather<br>Condition                | USN-5                   | As a user,I can view the temperature and humidity level through Application  | I can analyze the<br>Temperature and humidity<br>level in the Farm |
|                        |                                     | USN-6                   | As a user I can receive the Weather Condition Alerts in farm through Application                                   | I can access Weather<br>Condition in that particular<br>area       |
|                        | Soil moisture condition             | USN-7                   | As a user, I can view moisture levels in Soil through an application.  | I can analyze the soil moisture level in that field                |
|                        | Crop<br>Irrigation                  | USN-8                   | As a user, I can remotely control the water pump through the mobile app  | I can turn ON/OFF and control the water pump                       |
|                        |                                     | USN-9                   | As a user, I can automatically irrigate my farm using the soil moisture sensors                                    | My farm can be automatically irrigated                             |

| User<br>Type            | Functional<br>Requirement<br>(Epic) | User<br>Story<br>Number | User Story / Task  | Acceptance criteria   |
|-------------------------|-------------------------------------|-------------------------|--|---|
|                         | Alert<br>Notification               | USN-10                  | As a user, I can receive alert notification through the app when an animal which is a threat to the farm is entering into the farm | I can receive the notification from the app                           |
|                         |                                     | USN-11                  | As a user, I can receive alert<br>email when an animal which<br>is a threat is entering into<br>the farm                           | I can receive an alert<br>through email                               |
|                         | Drive away animals                  | USN-12                  | Turning ON the speaker at a specific location where the animal is intruding  | Speakers can be turned ON automatically                               |
|                         |                                     | USN-13                  | Turning ON the LED incase of animal intrusion during night time  | LED can be turned ON automatically                                    |
|                         | Power supply                        | USN-14                  | The Power is generated by the solar panel for running the motor.   | Power is generated automatically from sunlight                        |
|                         | Detection of animals                | USN-15                  | As a user, I can detect the animals through the movement   | I can receive information through application                         |
|                         |                                     | USN-16                  | As a user, I can detect the animals through the sound  | I can receive information through application                         |
|                         |                                     | USN-17                  | As a user, I can view the animals through the camera   | I can receive information through application                         |
| Customer care executive | Receiving feedbacks                 | USN-18                  | As a user, I can receive the customer feedbacks through google forms   | I can receive the feedbacks   |
|                         |                                     | USN-19                  | As a user, I can receive the queries of the customer through the interactive chat platform   | I can receive the notification<br>when customer is posting a<br>query |
|                         | Replying to the queries             | USN-20                  | As a user, I can reply to the queries of the customer  | I can send reply in the interactive chat platform                     |