PROJECT DESIGN PHASE-II
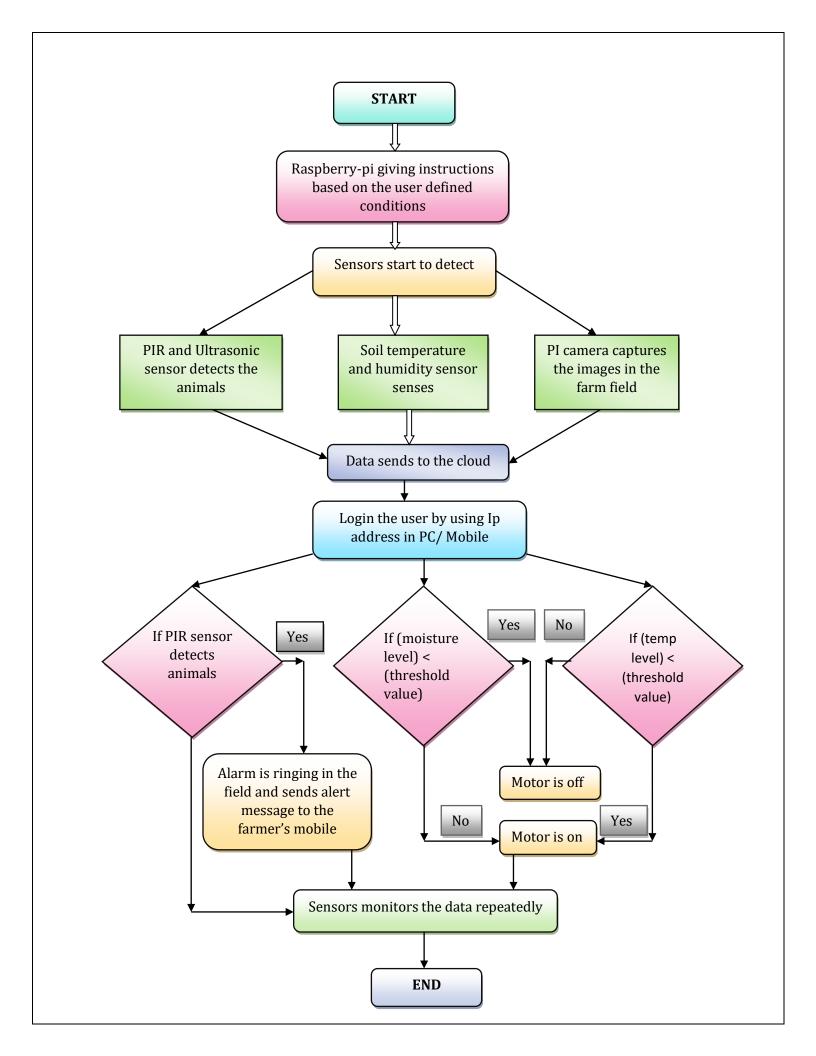# DATA FLOW DIAGRAM & USER STORIES

Date	03 October 2022
Team ID	PNT2022TMID35809
Project Name	IOT based Smart Crop Protection System
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 stored.

```
                           START


              Raspberry-pi giving instructions
              based on the user defined
              conditions


                 Sensors start to detect


   PIR and Ultrasonic        Soil temperature         PI camera captures
   sensor detects the        and humidity sensor      the images in the
   animals                   senses                   farm field


                    Data sends to the cloud


              Login the user by using Ip
              address in PC/ Mobile


                                      Yes    No

   If PIR sensor    Yes      If (moisture                    If (temp
   detects                   level) <                        level) <
   animals                   (threshold                      (threshold
                             value)                           value)


                                              Motor is off
   Alarm is ringing in the
   field and sends alert          No                    Yes
   message to the               Motor is on
   farmer's mobile


              Sensors monitors the data repeatedly


                            END
```

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Mobile user	Registration	USN-1	User can register for the application by entering email, password, and confirming password in mobile app.	I can access my account / dashboard	High	Sprint-1
	Mail verification and confirmation	USN-2	User will receive confirmation email onceregistered for the application	I can receive confirmation and verification email & click confirm and verify.	High	Sprint-1
	Registration through Facebook	USN-3	User can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low	Sprint-2
	Login	USN-4	User can access the mobile application by entering email and password	I can login to my account	Medium	Sprint-1
	Dashboard	USN-5	User can view the climatic condition	I can view the field data	High	Sprint-1
		USN-6	User can view different type of sensor value monitoring in the field	I can view the values of field shown by app	High	Sprint-1
		USN-7	User can able to control and monitor the field manually depending upon the data report shown.	I can control the field manually.	High	Sprint-2
Web user	Functions are same as the mobile users through available web service.					
Customer Care Executive	Technical support team	USN-1	User can contact and get the support from technical assistant when	I can able to contact and solve the issue.	High	Sprint- 1

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
			there is issue in IOT system.			
	Farmer welfare support care	USN-2	User can able to get the help and information for increasing the yield and thereby giving solution to the problems.	I can able to get the info and solution to problem.	Medium	Sprint -2
Administrator	Representative	USN-1	User can get the support and information from respective authority	I can able get the info from administration	Medium	Sprint - 2
	Farmer Administration	USN-2	User can act as part of organization after a period of time. They can manage the groups with some terms and conditions.	I can able to manage the organization activity	Medium	Sprint- 3
Customer queries	Working	USN - 1	User can able to get alert notification when threat is detect.	I can get intimation from the alert system	High	Sprint - 1
		USN-2	User can able to turn on the motor pump / buzzer/Light system to overcome threats in field.	I can control the system to protect the cultivation	Medium	Sprint-2
	Availability	USN - 3	User can able to get the report and monitor 24/7.	I can able to get the info at anytime	High	Sprint- 2
	Security	USN - 4	User data is secured and end to end encrypted with password based system.	I can able to access the system through password only.	High	Sprint - 2

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer service	Service assistance	USN - 1	User can get service availability for the entire smart system periodically.	I can get the assistant for service.	Medium	Sprint -2
		USN-2	User can get immediate reponse from the service assistant about functionality of the system.	I can get good response.	HIgh	Sprint -3