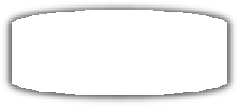
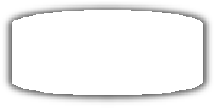
PROJECT DESIGN PHASE-II

# Data Flow Diagram & User Stories

|  |  |
| --- | --- |
| Date | 15-October-2022 |
| Team ID | PNT2022TMID18172 |
| Project Name | Exploratory Analysis of Rainfall Data in India for Agriculture |
| 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.



**FRONT END BACK END**



Enters the phone number

Gets the OTP message

Registration

## Rainfall Database

Rainfall data is used to train the model

Entities

Farmer

Enters the month and year

User enters the personal details

To Predict the rainfall

Rainfall Prediction

User Data

Profile

Home page gets displayed

Home Page

To know more about crops



Crops

Crop Details

# ML Model

Data Preprocessing Feature Selection Missing data

Applying Random

Forest Algorithm

Process Database DataFlow

The rainfall data and the crop suggestions are shown

User data is fed into the ML model

## Crops database

Training and Testing Model

Result

The predicted value is sent to result

## User Stories

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **User Type** | **Functional Requirement (Epic)** | **User Story Number** | **User Story / Task** | **Acceptance criteria** | **Priority** | **Release** |
| Farmers (Mobile user) | Registration | USN-1 | As a user, I can register for the application by using phone number | I can access the profile and home page | High | Sprint-1 |
|  |  | USN-2 | As a user, I will receive OTP message, Once I have registered for the application | I can receive confirmation message | High | Sprint-1 |
|  | Profile | USN-3 | As a user, I have to enter my personal details | I can access my home page | High | Sprint-1 |
|  | Home page | USN-4 | As a user, I can either click on rainfall prediction or crops button | I can go to the desired page | Medium | Sprint-2 |
|  |  | USN-5 | As a user, I can click on the “more  action” button | I can view my personal details | Medium | Sprint-2 |
|  | Rainfall Prediction | USN-6 | As a user, I have to enter the desired month and the year | To know the rainfall on the given month | High | Sprint-3 |
|  | Crops | USN-7 | As a user, I can view the details of the crops | To know more about the crop cultivations | Medium | Sprint-3 |