

Project Design Phase-II

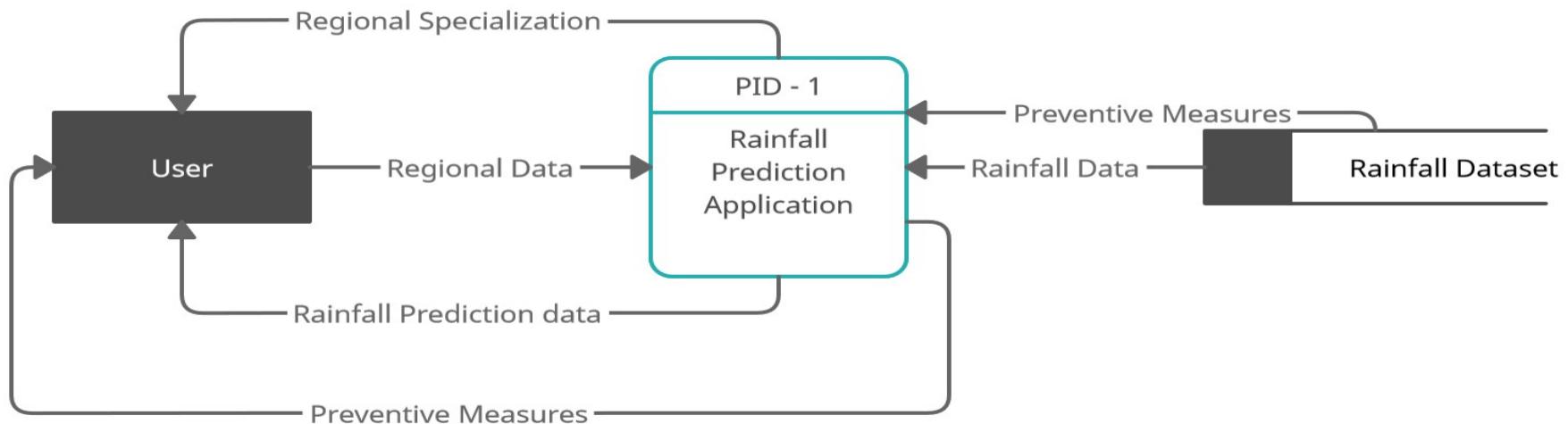
Data Flow Diagram & User Stories

Date	05 October 2022
Team ID	PNT2022TMID12583
Project Name	Exploratory Analysis of Rainfall Data in India for Agriculture
Maximum Marks	4 Marks

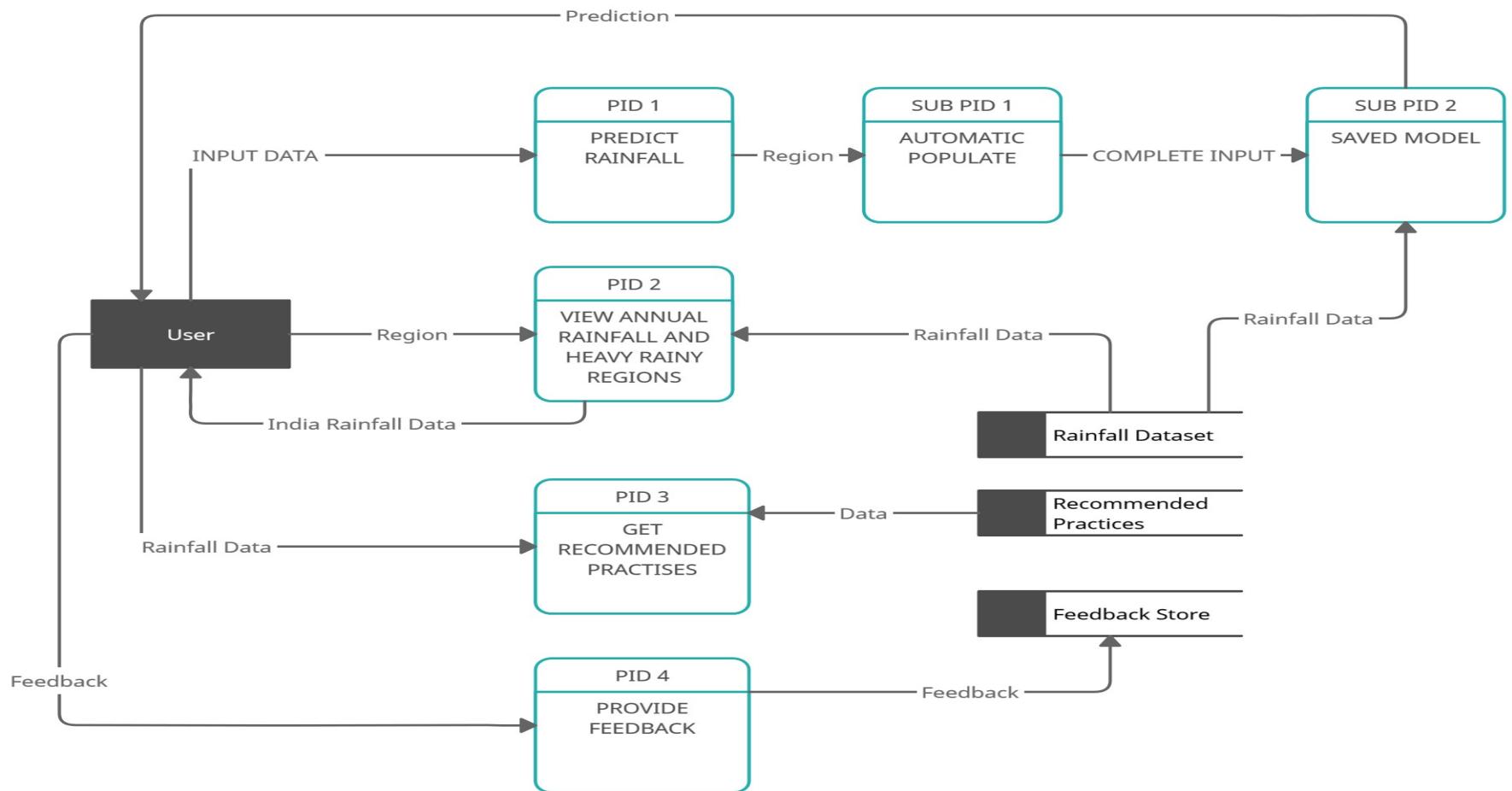
Data Flow Diagrams:

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.

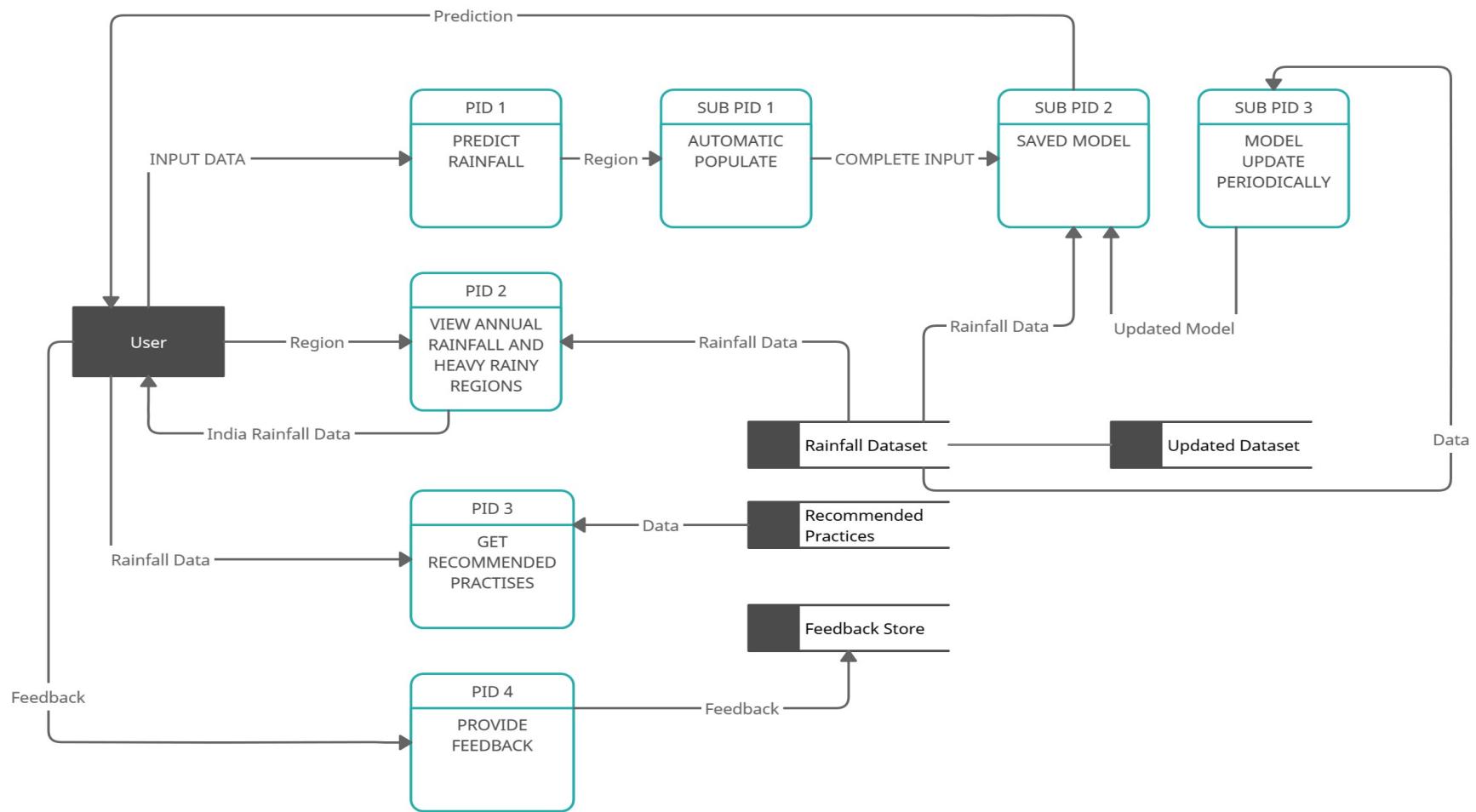
0 – LEVEL DATA FLOW DIAGRAM:



1 – LEVEL DATAFLOW DIAGRAM :



2 – LEVEL DATA FLOW DIAGRAM :



User Stories

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

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
User in Website	Basic Form Template	USN-1	Develop a simple html file with a basic form where users can provide their inputs like they can select their region of interest, wind direction etc.	User should be able to select any region in India and enter the values	High	Sprint-1
	Auto Fill Inputs	USN-2	The input fields must be auto filled If the user is not sure about the values given the region	The inputs must get auto filled once the region is selected	High	Sprint-1
	Basic Flask Server	USN-3	A basic flask server that has all the necessary routes and integrated with the website A basic flask server that has all the necessary routes and integrated with the website	The corresponding functions must execute correctly once route is hit and checked by tools like postman	Medium	Sprint-1
Backend Team	Model Building and Testing	USN-4	Construct Machine Learning models trained on the pre-processed dataset and observe their accuracy. Save the Models as .pkl file	Queries can be raised in situation of doubts	High	Sprint-2
Frontend Team	Design the website and add all required pages	USN-5	Develop Website with all the required pages	All necessary pages must be developed and appropriate content is filled	High	Sprint-2

	Add Recommended Features	USN-6	Recommend best practises based on the rainfall	The user will get all their doubt clarified	High	Sprint-2
	Visualisation	USN-7	Add Visualisation for rainfall data across all the states in India	The visualisations has to be dynamically loaded and charts must be responsive	High	Sprint-3
Developer team	Auto Update Model	USN - 8	Update the ML model with the updated dataset	Model stays up to date	High	Sprint - 3