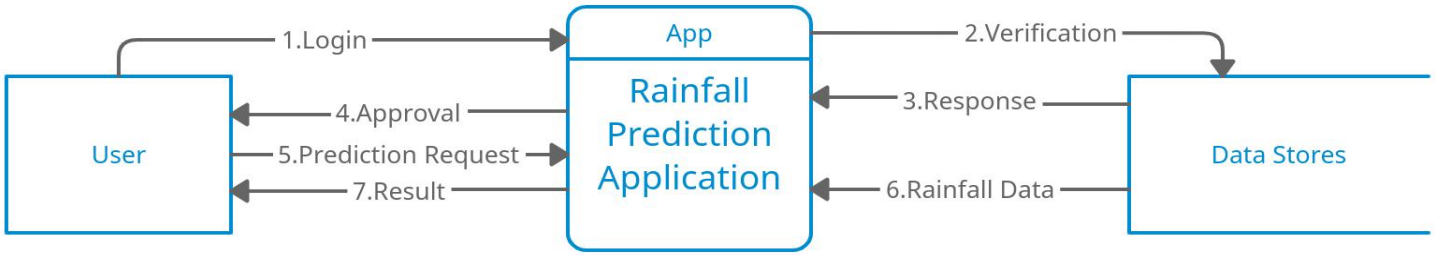
Data Flow Diagrams & User Stories

Date	09 November 2022
Team ID	PNT2022TMID20835
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.

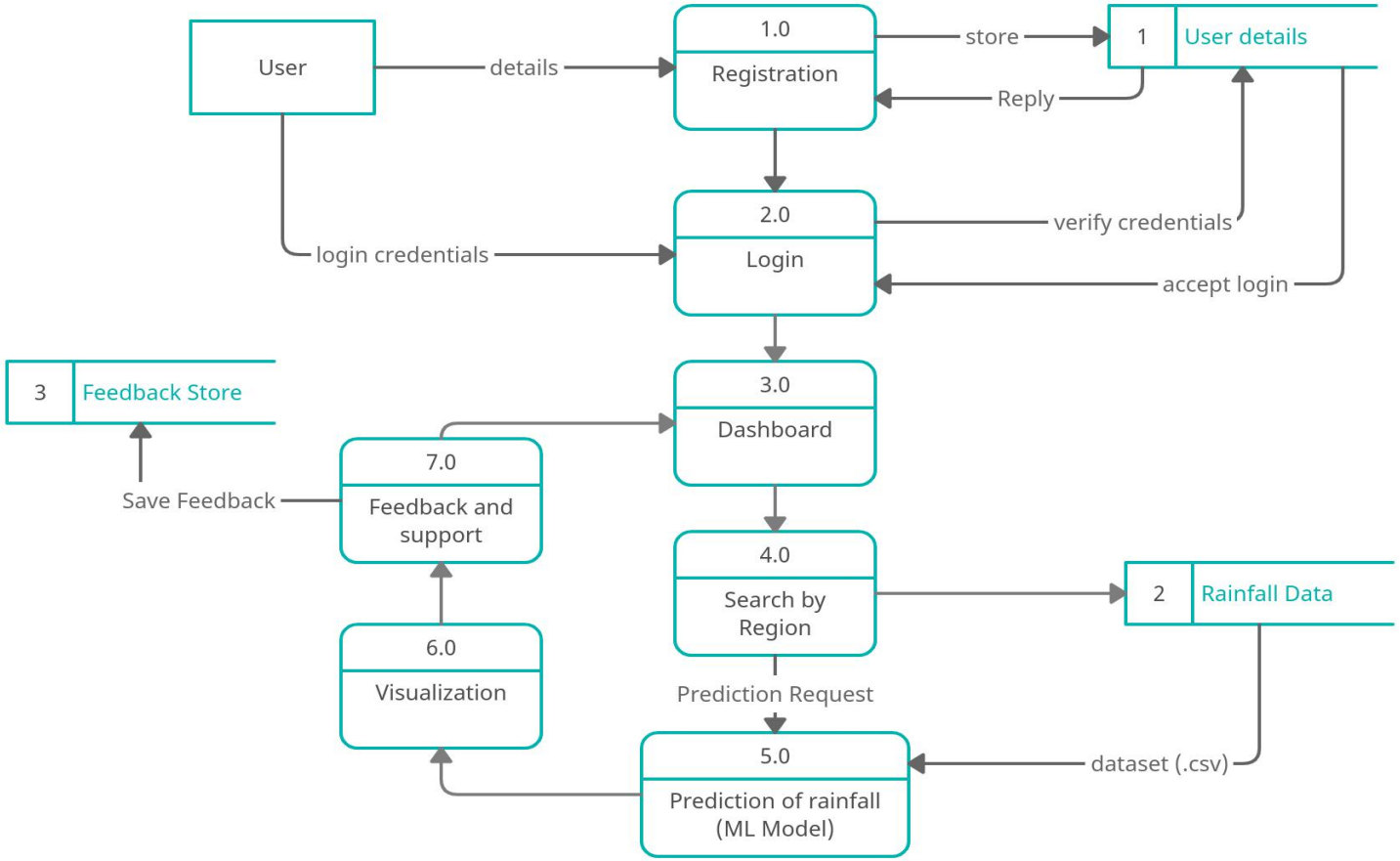
0 – LEVEL DATA FLOW DIAGRAM:



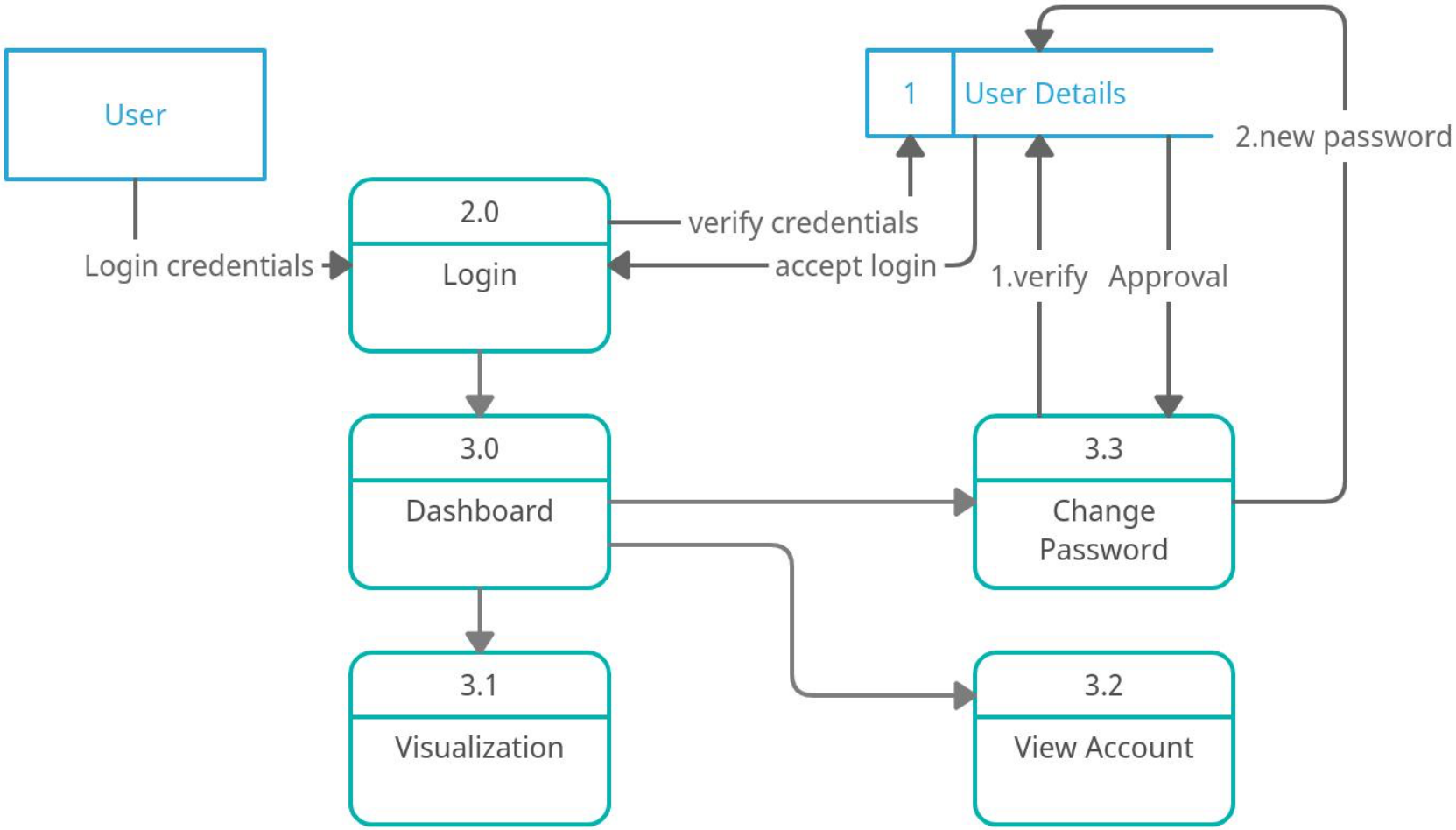
1. User logins to the application using his or her credentials.
2. Verification of credentials is done using the data stored in the database.
3. Application getting the response from the database.

4. Approval of login or else an error message for incorrect credentials.
5. Prediction request for the particular area or region is sent by the user.
6. Application getting the dataset of previous year/month/day rainfall data from the database/cloud.
7. The result has been sent to the user as an output after the prediction has been made using the machine learning model in the application.

1 – LEVEL DATA FLOW DIAGRAM:



2 – LEVEL DATA FLOW DIAGRAM:



User Stories:

The user stories for the product are listed below

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
User in Website	Registration	USN-1	User can register for the application by entering his or her email, password, and confirming the password.	Account specific tasks and actions can be performed	High	Sprint-1
		USN-2	User will receive confirmation email or message once registered for the application	Verify the registered account	High	Sprint-1
		USN-3	Validation of the user can be done directly using email or OTP	Account validated and got access to profile dashboard	Medium	Sprint-1
	Login	USN-4	Enter the username and password to login to the application	Right account credentials should be entered	High	Sprint-1
		USN-5	The existing credentials should be used for login on multiple systems		Medium	Sprint-1
	Dashboard	USN-6	User can search for the region where he/she wants to know the prediction of rainfall	Searching for the region in India will be accepted only	High	Sprint-2
		USN-7	User can view the visualization of the rainfall data for a specific region in India or for a specific time period		Medium	Sprint-2
		USN-8	User can change his/her password and can view the account details and search history	Verification will be required and new password should be entered	High	Sprint-2
		USN-9	The prediction or analysis request can be asked for the desired region for future or past events respectively		High	Sprint-2

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
		USN-10	User can give the feedback on the accuracy of the prediction and on the user interface		High	Sprint-3
Support Team	Support	USN-11	Responds to user queries via telephone, email etc.	Queries can be raised in situation of doubts	Medium	Sprint-3
		USN-12	The team must analyse all the queries and try to debug and make plans so that such queries wouldn't be raised again		Low	Sprint-3
		USN-13	Organize for a FAQ session where commonly asked doubts can be redressed by the team	The user will get all their doubt clarified	Low	Sprint-3
		USN-14	The team must respond immediately to the queries based on the priority	Queries should get resolved	High	Sprint-3
Core Development Team	Core Function	USN-13	Design, develop the application in such a way that the best user interface and maintenance should be taken care of.	Easy and self-understandable user interface	High	Sprint-4
		USN-14	The website is responsive on all the devices and the screen sizes	User experience should be good irrespective of the devices or platforms	Medium	Sprint-4
		USN-15	The updates should be on time with the solutions of the raised queries	The existing functionalities should not affected by the update	High	Sprint-4