Project Design Phase-II
Data Flow Diagram & User Stories

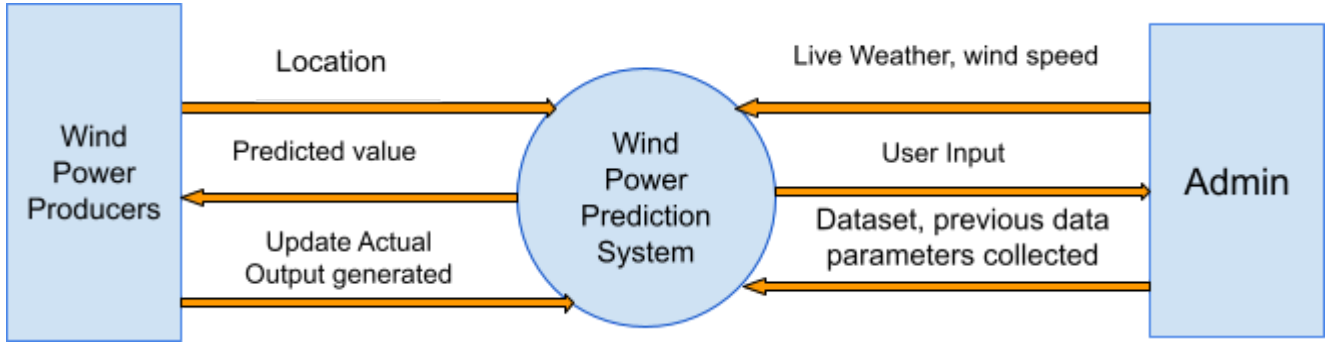
Date	03 October 2022
Team ID	PNT2022TMID31390
Project Name	Project - Predicting the energy output of wind Turbine based on weather condition
Maximum Marks	4 Marks

Data Flow Diagrams:

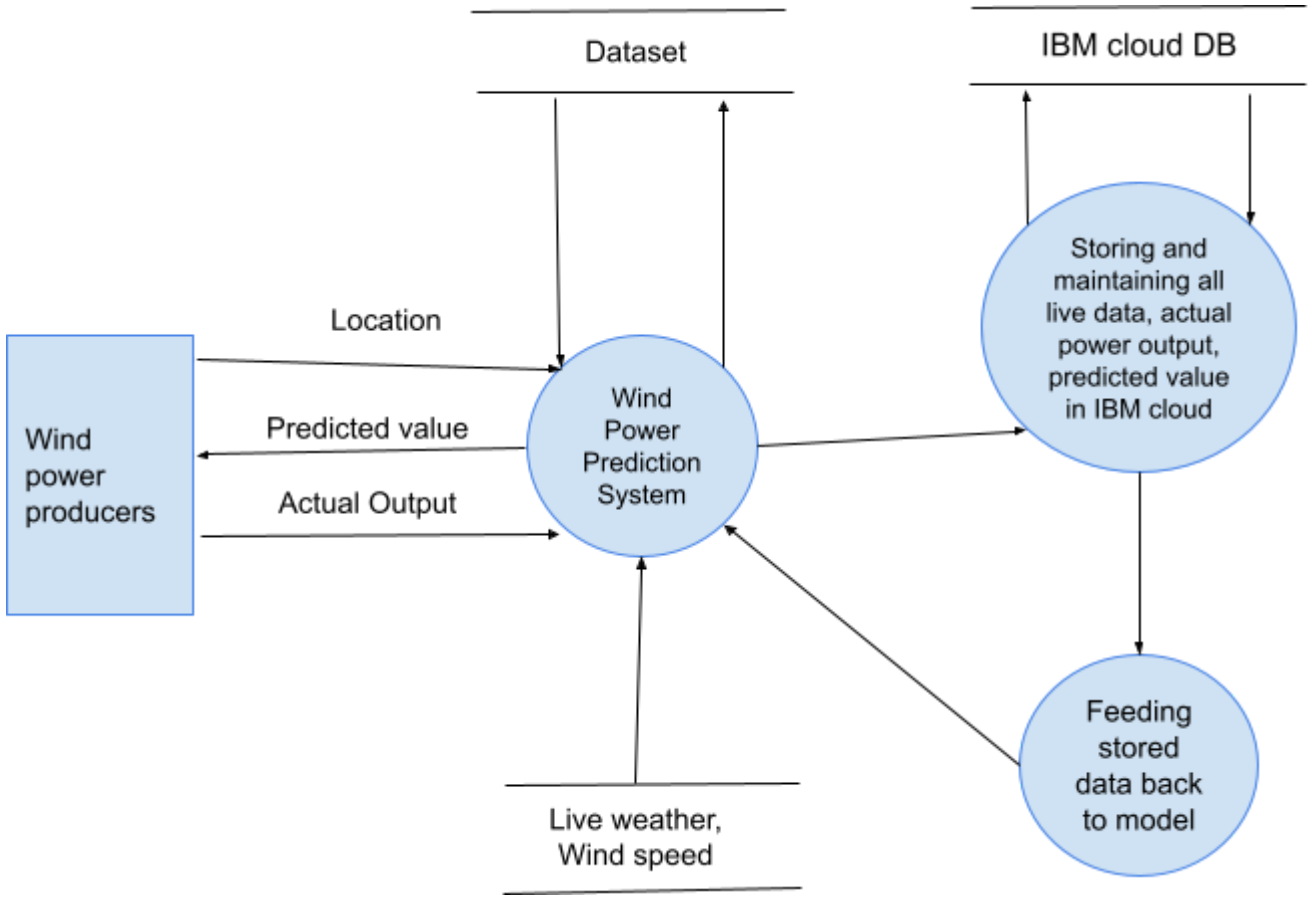
A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

DATA FLOW DIAGRAM (DFD):

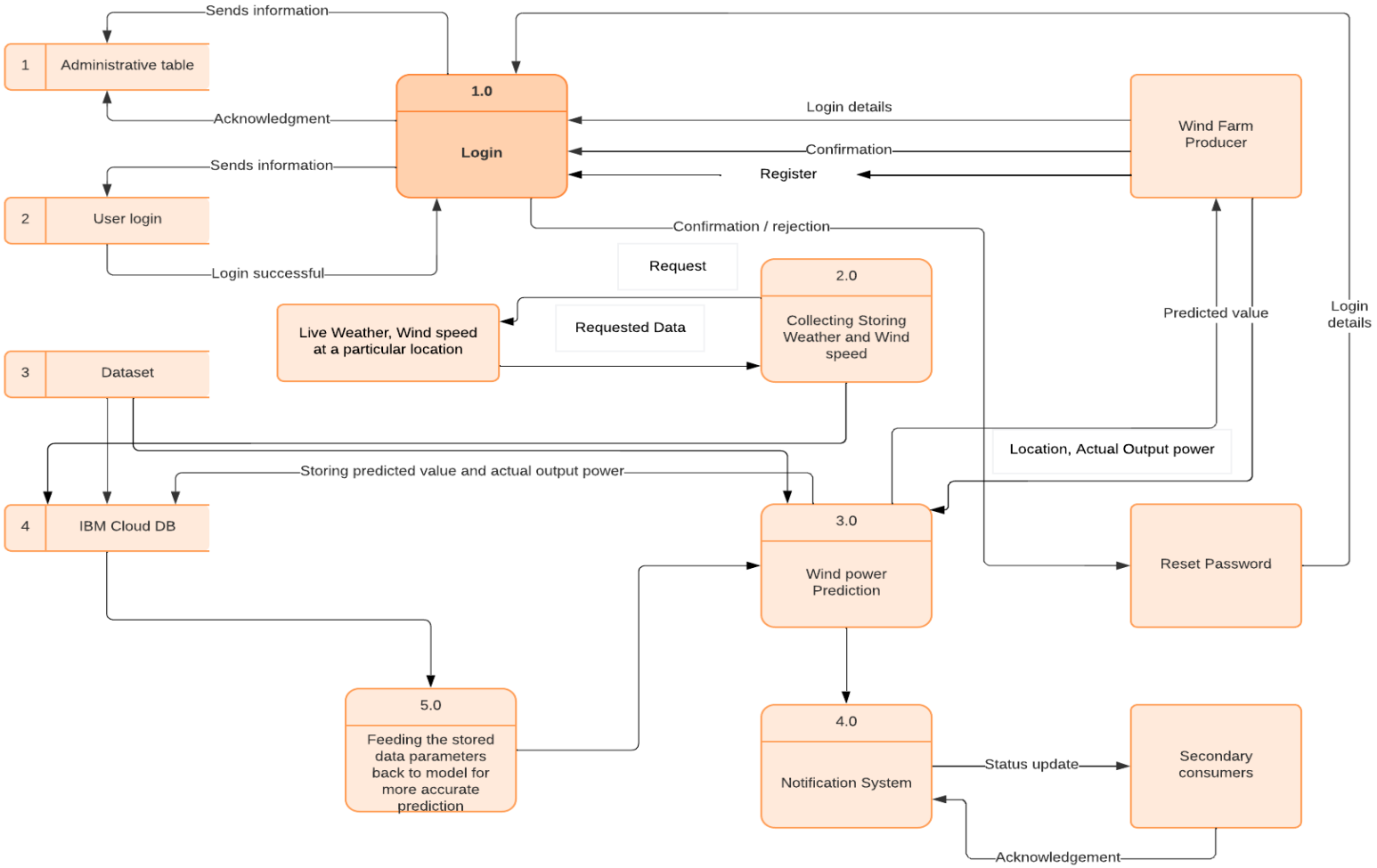
LEVEL 0



LEVEL 1


Dataset
IBM cloud DB
Storing and maintaining all live data, actual power output, predicted value in IBM cloud
Location
Wind power producers
Predicted value
Actual Output
Wind Power Prediction System
Feeding stored data back to model
Live weather, Wind speed

FINAL DFD DIAGRAM (BASED ON GANE-SARSON MODEL)



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
Customer (Wind power producer)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-1
	Login	USN-3	As a user, I can log into the application by entering email & password	I can access my account / dashboard	High	Sprint-1
		USN-4	As a user, I can use Forgot Password option to reset my password if I forgot my current password	I can reset password through mail received for password reset	Medium	Sprint-2
	Dashboard	USN-5	As a user, I can access the Dashboard to view my profile	I can view my profile	Low	Sprint-3
		USN-6	As a user, I can access the Dashboard to give my location, actual output power for prediction	I can get customised prediction value for my wind farm	High	Sprint-1
	Profile	USN-7	As a user, I can edit my profile from time to time	I can update my profile	Low	Sprint-3
	Notification	USN-8	Sending notifications to secondary consumers if predicted output will not be able to generate due to unexpected weather changes and outages	I can send notifications thus my customers are satisfied as notifications are sent priorly	High	Sprint-1
Administrator	IBM cloud	USN-9	As an administrator, I can store actual output power, predicted value, weather and wind speed	I store and maintain these data	High	Sprint-1
	IBM cloud	USN-10	As an administrator, I can feed all the stored data as parameters back to the model for more accurate prediction	I can train the model with more data to get accurate prediction	High	Sprint-1
	Login	USN-11	As an administrator, I can reset password for customers	I can help customers to get back their access to account	Medium	Sprint-2