

## Project Design Phase-II

### Data Flow Diagram & User Stories

Date	21 October 2022
Team ID	PNT2022TMID21736
Project Name	Predicting the energy output of wind turbine based on weather condition
Maximum Marks	4 Marks

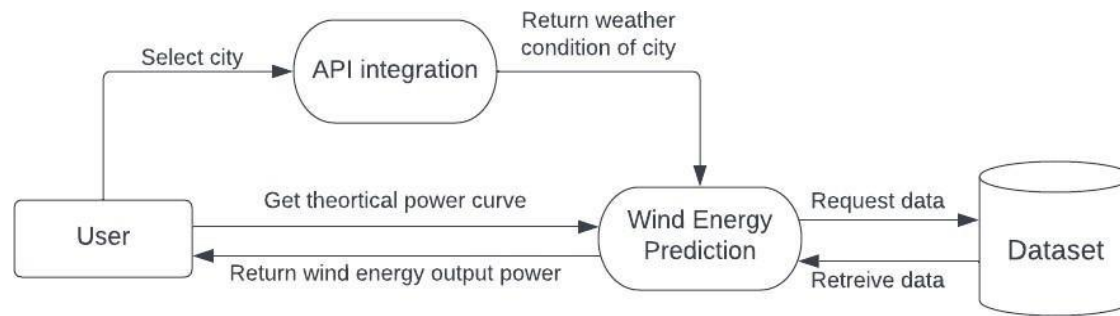
#### Data Flow Diagrams:

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.

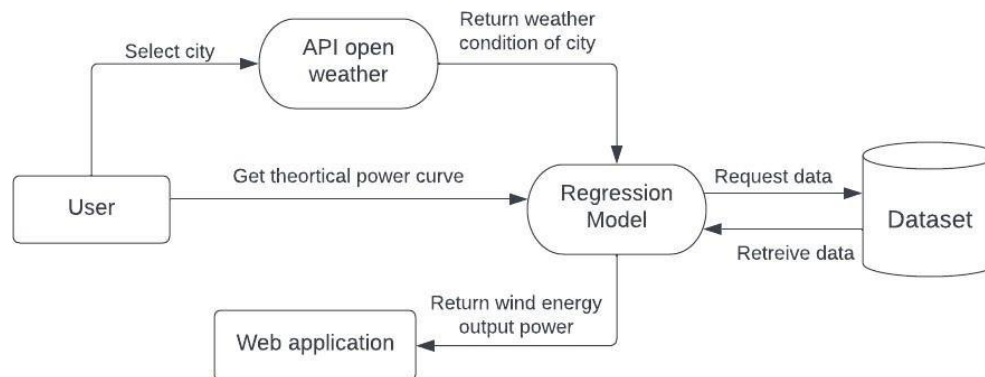
#### LEVEL 0:



## LEVEL 1:



## LEVEL 2:



## 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	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
		USN-3	As a user, I can register for the application through Gmail	I can register using existing email	Medium	Sprint-1
	Login	USN-4	As a user, I can log into the application by entering email & password	I can log in to the prediction application	High	Sprint-2
	Home Page	USN-5	As a user, after login I will be redirected to home page of the web app	I can have a overview of the predictor application	Low	Sprint-2
Administrator	Data Collection	USN-6	As an administrator, I have to collect dataset	dataset is available	High	Sprint-3
	Data Preprocessing	USN-7	As an administrator, I have to preprocess data and remove null fields	Cleaned dataset it ready for model building	Medium	Sprint-3
	Model Building	USN-8	As an administrator, I have to build regression model to predict wind energy output	Model is able to predict output	High	Sprint-3
	Training Model	USN-9	As an administrator, after model is built, it has to be trained to improve accuracy	Model is able to predict correct output at all times	High	Sprint-4
	API Integration	USN-10	As an administrator, API integration must be done to automatically input weather condition from the city entered by user	Weather condition is given as output when city is entered	High	Sprint-4

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer	Home (Application)	USN-11	As a user, I am allowed to select the city and can get the weather of the city.	I can select the city, If the city is correct, I can further enter the details.	Medium	Sprint-5
		USN-12	As a user I am allowed to view the weather of the selected city.	If correct city is selected , then the weather of the particular city will be displayed	Low	Sprint-5
		USN-13	As a User, I can click on calculate button	If the model is well trained, the energy output will be displayed on the web page	High	Sprint-5
		USN-14	As a user, I can download the result	I can download a pdf of the webpage	Low	Sprint-5