Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	15 October 2022
Team ID	PNT2022TMID53075
Project Name	Project - Predicting The Energy Output Of Wind Turbine Based On Weather Condition
Maximum Marks	4 Marks

Technical Architecture:

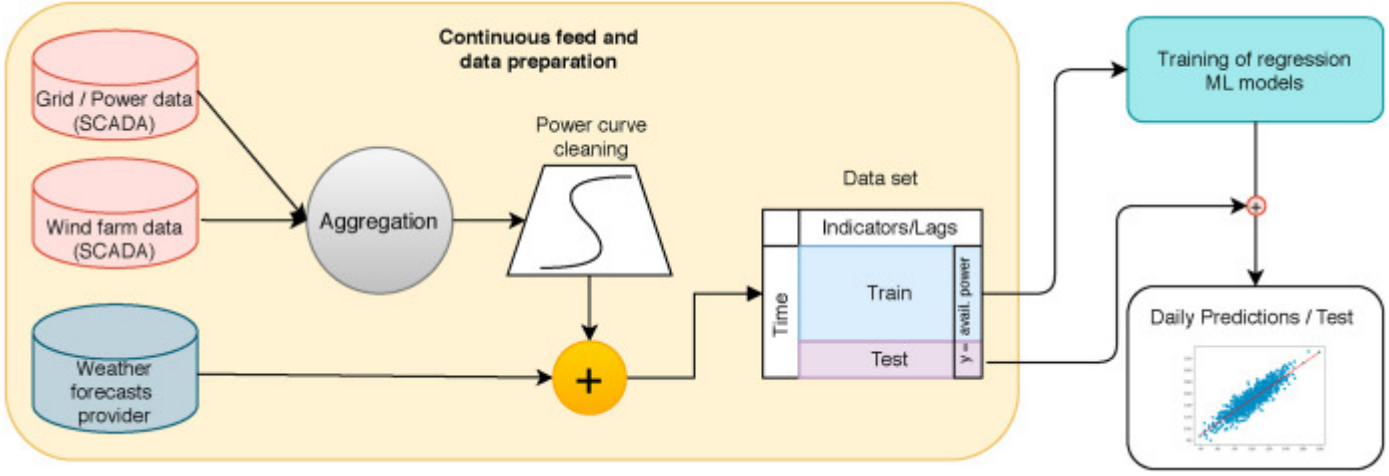

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User can input their windmill parameters and request for the analysis	HTML, CSS, JavaScript
2.	Application Logic-1	Constructing the Model based on parameters input	Python
3.	Application Logic-2	Model Validation and Implementation	IBM Watson
4.	Machine Learning Model	Various ML techniques are used on samples of test data to be finally constructed into a single model	Ensemble Method

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask	Micro Web FrameWork
2.	Security Implementations	User logins are secured by credentials and limited login attempts. User data secured by cloud security services	Credentials are saved by salting and hashing. IBM watson security services
3.	Scalable Architecture	Handles multiple user requests	IBM Watson
4.	Availability	Ensured to be available all the time and maintenance work is priorly informed	Use of Multiple servers
5.	Performance	Quick response is ensured	IBM Watson