

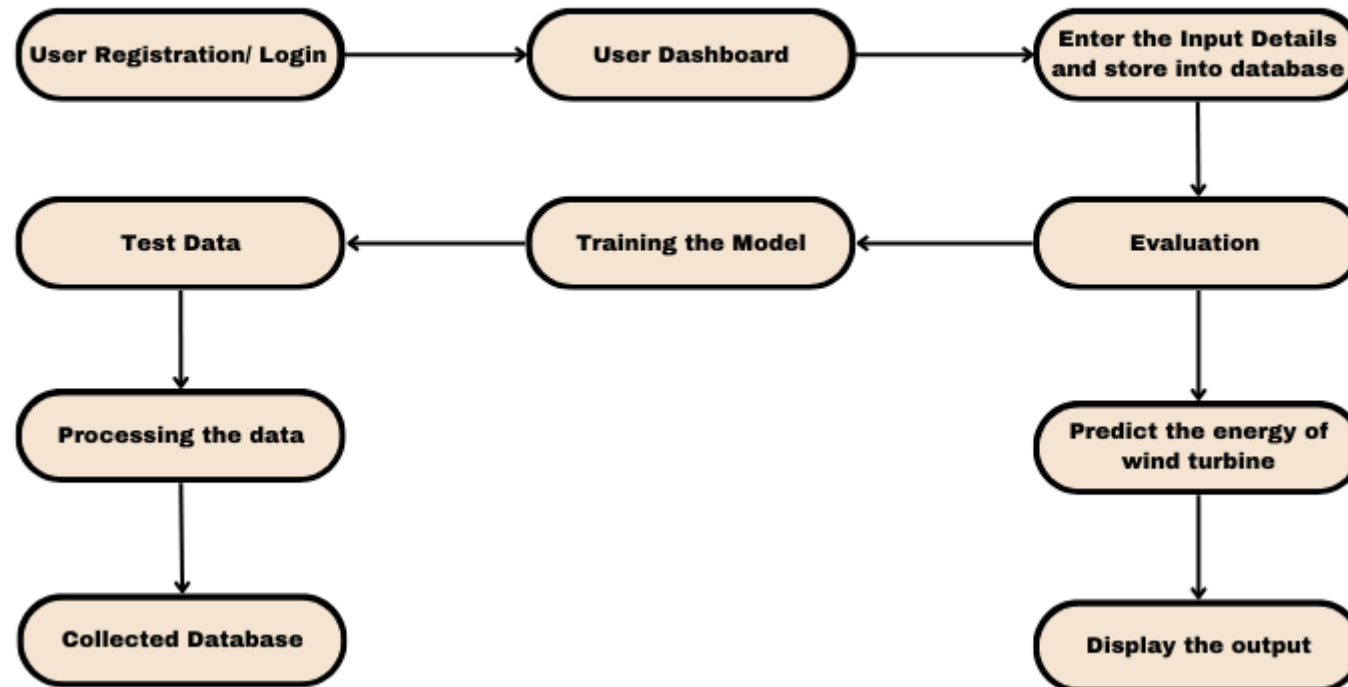
Project Design Phase-II
Data Flow Diagram & User Stories

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|---------------|---|
| Date | 04-11-2022 |
| Team ID | PNT2022TMID42592 |
| Project Name | Predicting the energy output of wind turbine based on weather condition |
| Maximum Marks | 4 Marks |

Data Flow Diagrams:

- 1, The user should register on web application using mail ID and password**
- 2. The user should enter the wind details such as wind speed, wind direction and temperature**
- 3. The data given by the forecaster is taken as the input and will get stored in IBM cloud database**
- 4. The application is build to predict the energy that produces by wind turbine based on weather condition.**

FLOW CHART



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 |
|---------------|--|-------------------|--|--|----------|----------|
| Admin | Data set | USN-1 | Gather the information needed to make the wind energy prediction value | Enough data has been gathered to train the model | High | Sprint-1 |
| | Data Pre-processing | USN-2 | Perform data cleaning to optimize the dataset | Clean Dataset enough to make accurate predictions | High | Sprint-1 |
| | Training & Building Model | USN-3 | Building the model using linear regression algorithms to classify the data | Model should be used for predicting exact valuation of the wind energy. | High | Sprint-1 |
| | Deploy the model | USN-4 | Deployment of ML model using IBM Cloud | Model should be working fine from the cloud | High | Sprint-1 |
| | Integrate the web application with the IBM model | USN-5 | Use flask for the integration purpose | The model ought to be simple to use and reliable on the web application. | High | Sprint-1 |
| Meteorologist | Home page | USN-6 | Information on the application and the process for wind energy prediction. | We can get an idea about how to use these model | Medium | Sprint-2 |
| | Registration | USN-7 | As a user, I can register for the application by entering my email, password, and confirming my password | User can access my account / dashboard | High | Sprint-3 |
| | Login | USN-8 | As a user, I can log into the application by entering email & password | User can login to my account | High | Sprint-3 |
| | Dashboard | USN-9 | User can enter the details and get the prediction values. | User can add input values | Medium | Sprint-1 |
| | Output | USN-10 | As a user, I can be able to access the predicted output value of wind energy | Predicted values must be displayed depending on the data provided by the user. | Medium | Sprint-1 |