

**Project Design Phase-II**  
**Solution Requirements (Functional & Non-functional)**

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

**Functional Requirements:**

Following are the functional requirements of the proposed solution.

| FR No. | Functional Requirement (Epic)   | Sub Requirement (Story / Sub-Task)                        |
|--------|---------------------------------|---|
| FR-1   | User Registration               | Registration through Mobile<br>Registration through Gmail |
| FR-2   | User Confirmation               | Confirmation via Email<br>Confirmation via OTP            |
| FR-3   | User login through (web)        | Login registered mail id and password                     |
| FR-4   | User login through (mobile app) | Login registered mail id and password                     |
| FR-5   | User needs                      | In the app, enter your input values.                      |

**Non-functional Requirements:**

Following are the non-functional requirements of the proposed solution.

| FR No. | Non-Functional Requirement | Description   |
|--------|----------------------------|---|
| NFR-1  | <b>Usability</b>           | The system should be user friendly for the forecaster. It should recommend predicting the wind energy.                  |
| NFR-2  | <b>Security</b>            | The login information should not be accessed by any other user than the respective.<br>The user data should be private. |
| NFR-3  | <b>Reliability</b>         | The Forecaster can be able to guess the approximate value of the wind energy.   |
| NFR-4  | <b>Performance</b>         | The wind energy value will get updated every time consecutively according to the weather condition.                     |
| NFR-5  | <b>Availability</b>        | It can be used from anywhere at any time.   |
| NFR-6  | <b>Scalability</b>         | It is easily adaptable.<br>This device can handle any number of registrations.  |