

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

Title : **Predicting the energy output of wind turbine based on weather condition**

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Table-1 : Components & Technologies:

S.No	Component	Technology
1.	User Interface	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Java / Python
3.	Application Logic-2	IBM Watson STT service
4.	Application Logic-3	IBM Watson Assistant
5.	Database	NoSQL
6.	Cloud Database	IBM Cloudant
7.	File Storage	IBM Block Storage
8.	External API-1	IBM Weather API
9.	External API-2	Aadhar API

10.	Machine Learning Model	Regression analysis
11.	Infrastructure (Server / Cloud)	IBM Cloudant

Table-2: Application Characteristics:

S.No	Characteristics	Technology
1.	Open-Source Frameworks	Technology of Opensource framework
2.	Security Implementations	Encryption algorithms.
3.	Scalable Architecture	3 tier architecture.
4.	Availability	HTML
5.	Performance	Amazon Redshift

References:

<https://c4model.com/>

<https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/>

<https://www.ibm.com/cloud/architecture>

<https://aws.amazon.com/architecture>

<https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d>