

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

Date	03 October 2022
Team ID	PNT2022TMID24825
Project Name	Project - Detecting Parkinson's Disease using Machine Learning
Maximum Marks	4 Marks

**Technical Architecture & Stack:**

**Table-1: Components & Technologies:**

S.No	Component	Description	Technology
1.	User Interface	The user uses our website via pc or mobile to get their diagnosis	HTML & Python
2.	Application	The model predicts the diagnosis using the image uploaded by the user	IBM Watson, Machine Learning & Python
3.	Database	Image files like png are what we use to train, test & run model	Python
4.	Cloud Database	We store the model in the Database to Diagnosis the person	IBM DB2, IBM Cloudant etc.
5.	File Storage	The model will be saved in h5 format and images in png, we use under 500 MB to store the files	IBM Block Storage & Local Filesystem
6.	External API	Here we connect our customer with the model for testing	IBM Weather API, etc.
7.	Machine Learning Model	The machine learning model predicts whether the person has Parkinson's disease or not	mobilenet_v2 Model, etc.
8.	Infrastructure (Server / Cloud)	The model is deployed in both cloud and local servers for usage	Local & IBM Cloud Server

**Table-2: Application Characteristics:**

<b>S.No</b>	<b>Characteristics</b>	<b>Description</b>	<b>Technology</b>
1.	Open-Source Frameworks	mobilenet_v2 & tensorflow were used in model construction	Opensource & Python
2.	Security Implementations	Basic Security	Basic Security
3.	Scalable Architecture	Works on the said type files	HTML
4.	Availability	Standard Availability	HTML
5.	Performance	Accuracy of the model is the maximum it runs one picture at a time	Python, HTML