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

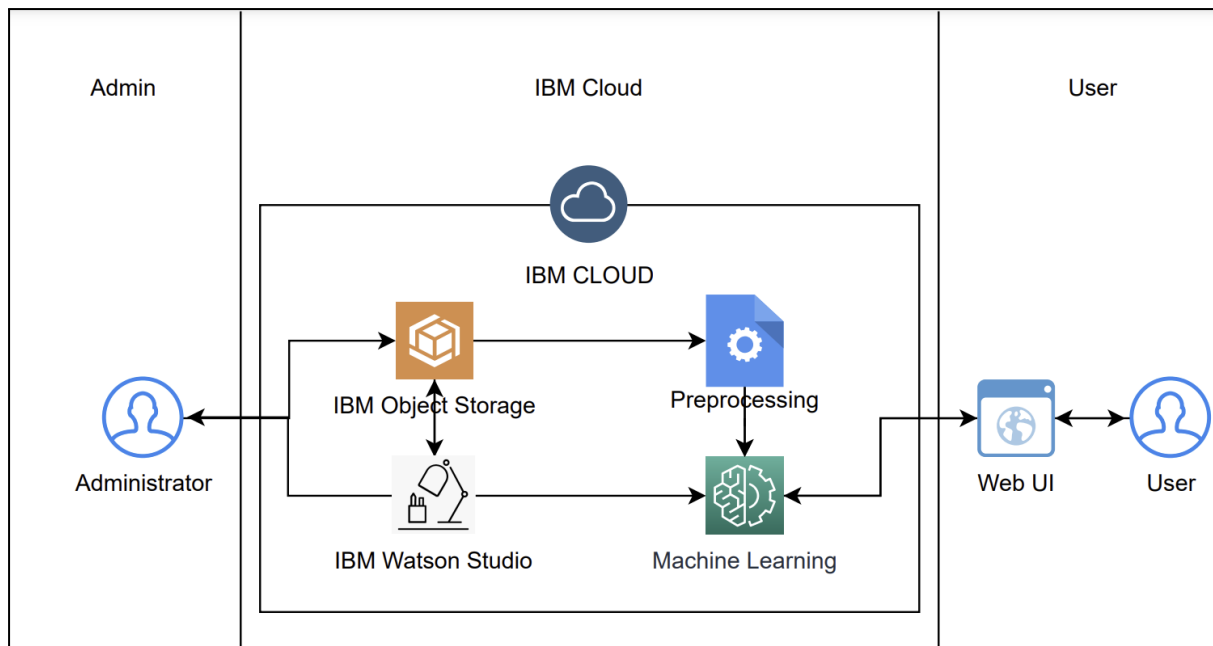| Date	03 October 2022
Team ID	PNT2022TMID35637
Project Name	Detecting Parkinsons' Disease Using Machine Learning
Maximum Marks	4 Marks

Technology Architecture:

Table-1: Components & Technologies:

S. No	Component	Description	Technology
1	User Interface	How the user interacts with the application	HTML, CSS, Python Flask
2	Application Logic-1	Logic for a process in the application	Python
3	Application Logic-2	Logic for a process in the application	IBM Watson
4	Database	Data Type, Configurations, etc	MySQL
5	Cloud Storage	Database Service on Cloud	IBM DB2
6	File Storage	File Storage requirements	Local Filesystem, IBM Object Storage
7	Machine Learning Model	Train the model using various machine learning algorithm for classification	Random Forest, Decision Tree Classifier, SVM, Naive Bayes
8	Infrastructure (Server / Cloud)	Deploying the application on the cloud	IBM Cloud

Table-2: Application Characteristics:

S. No	Characteristics	Description	Technology
1	Open-Source Frameworks	List the open-source frameworks used	Flask, Numpy, Pandas, Scikit-Learn, Tensorflow, Keras, Seaborn, Matplotlib
2	Security	List all the security/access controls implemented, use of firewalls, etc.	JWT, Cookies, IBM Cloud Security
3	Scalable Architecture	Justify the scalability of architecture	IBM DB2
4	Availability	Justify the availability of applications	IBM Watson, IBM DB2
5	Performance	Design Considerations for the performance of the application	Flask, IBM DB2