

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

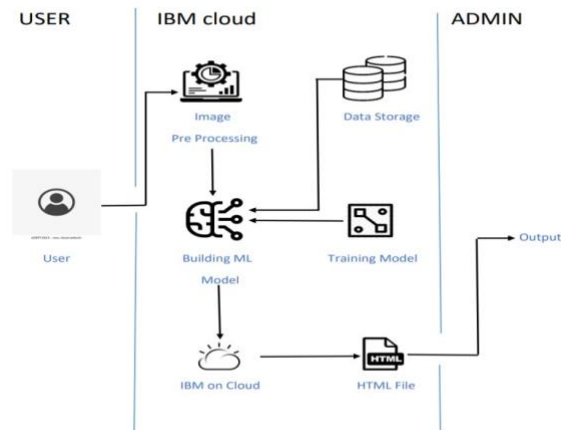
Date	03 October 2022
Team ID	PNT2022TMID32370
Project Name	Detecting Parkinson's Disease using Machine Learning
Maximum Marks	4 Marks

Technical Architecture:

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

Example: Order processing during pandemics for offline mode

Reference: <https://developer.ibm.com/patterns/ai-powered-backend-system-for-order-processing-during-pandemics/>



Guidelines:

1. Include all the processes (As an application logic / Technology Block)
2. Provide infrastructural demarcation (Local / Cloud)
3. Indicate external interfaces (third party API's etc.)
4. Indicate Data Storage components / services
5. Indicate interface to machine learning models (if applicable)

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web application UI	HTML
2.	Application Logic-1	Image preprocessing logic	Python
3.	Application Logic-2	Application model logic	IBM Watson
4.	Application Logic-3	Application model logic	IBM Machine learning
5.	Database	Data Type, Configurations etc.	MySQL
6.	Cloud Database	Database Service on Cloud	IBM DB2
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	IBM API
9.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Opensource framework
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	SHA-256, Encryptions, IAM Controls
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Web application
S.No	Characteristics	Description	Technology

4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Web application
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Web application