PROJECT DESIGN PHASE-II

TECHNOLOGY ARCHITECTURE

Date	15 October 2022
Team ID	PNT2022TMID28464
Project Name	Detecting Parkinson's Disease Using Machine Learning
Maximum Marks	4 Marks

3 TIER TECHNOLOGY ARCHITECTURE:

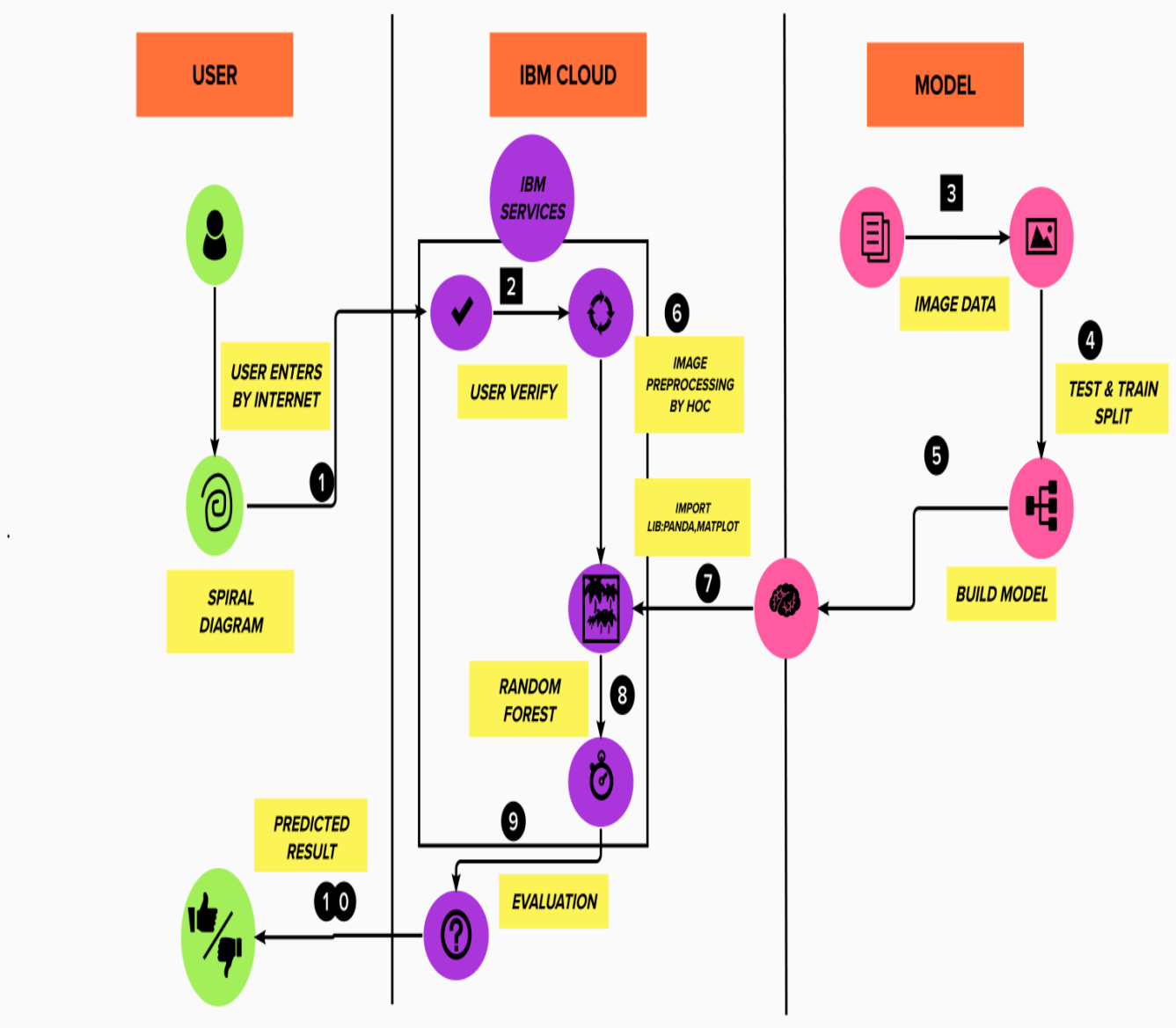

TABLE 1: COMPONENTS AND TECHNOLOGIES:

S.NO.	COMPONENTS	DESCRIPTION	TECHNOLOGY
1.	User Interface	Web UI, mobile app	HTML, CSS, Javascript, Flask
2.	Application Logic-1	User uploads drawings	Python image processor
3.	Application Logic-2	Prediction based on diagrams	Python IBM Watson STT service
4.	Application Logic-3	Predicted output	Random forest, hoc, IBM Watson assistant
5.	Database	Images	NoSql
6.	Cloud database	IBM cloud	IBM DB2
7.	File Storage	10-1000mb	IBM Block storage
8.	External API-1	User spiral drawings for prediction	Image processor
9.	External API-2	Data analysis for knowledge base	Train model in python
10.	Machine learning model	Prediction based on algorithm. Higher accuracy	HOC, Random Forest classifiers
11.	Infrastructure(Server/Cloud)	Cloud server con	IBM cloud

TABLE 2: APPLICATION CHARACTERISTICS:

S.NO.	CHARACTERISTICS	DESCRIPTION	TECHNOLOGY
1.	Open-source frameworks	Frontiers, Github	Python
2.	Security implementations	Encryption are used to make it more secure	Built-in encryption, BYOK
3.	Scalable architecture	3-tier architecture - horizontal	Python, css, js