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

Date	18 October 2022
Team ID	PNT2022TMID06735
Project Name	Project - Early Detection of Chronic Kidney Disease using Machine Learning
Maximum Marks	4 Marks

Technology Architecture

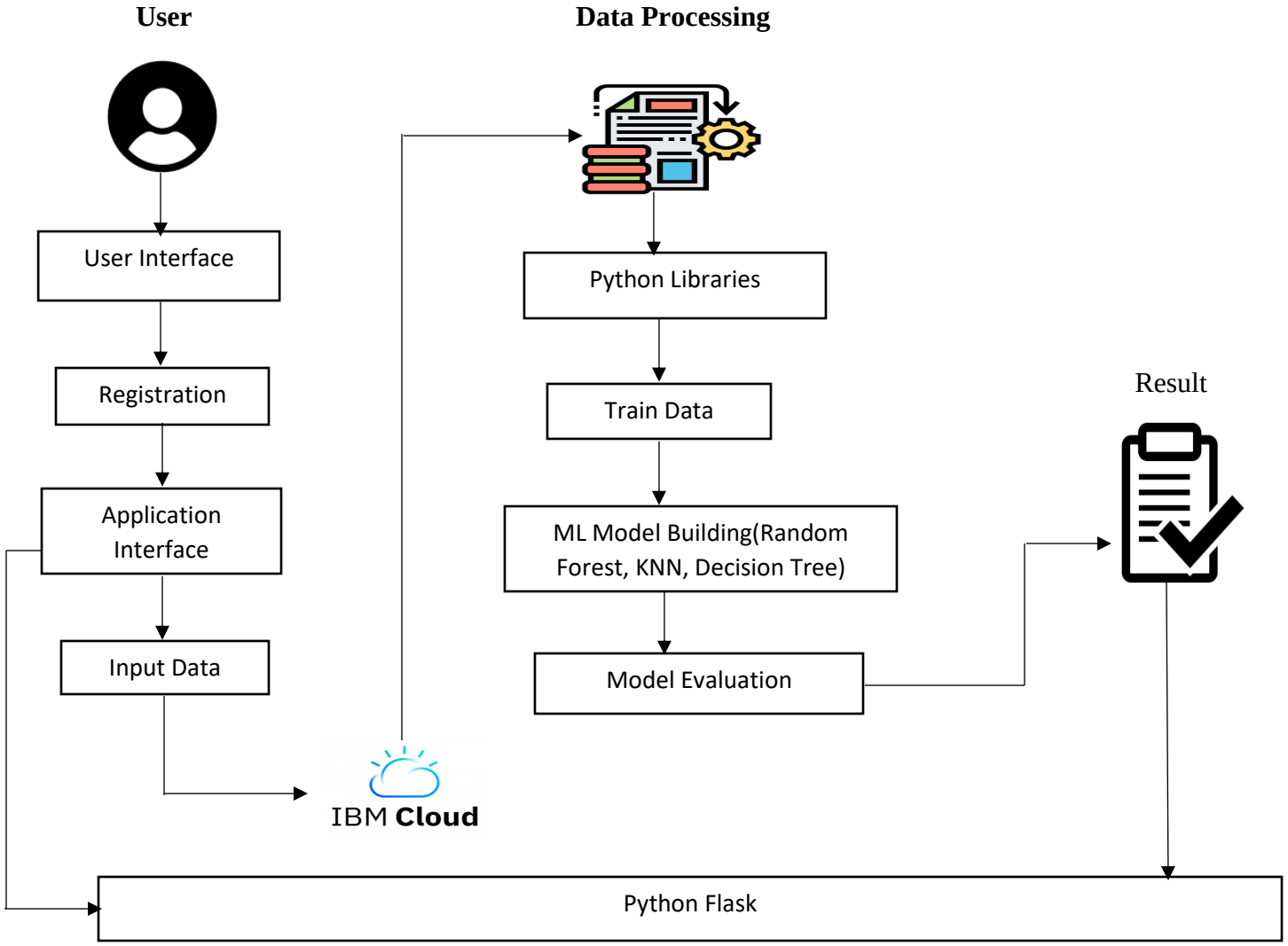

Table-1: Components and Technologies

S.NO	Component	Description	Technology
1	User Interface	How User interact with the application	HTML, CSS, Python flask, JavaScript
2	Application Logic-1	When the user click on the login button , he/she is directed to login page, if they are registered already.	HTML, CSS, Python flask
3	Application Logic-2	Get the input from the user and predicted based on the provided result	Machine Learning with Python
4	Application Logic-3	Displays the predicted Result	HTML, CSS, Python flask
5	Database	Store the User data	MYSQL
6	File Storage	File Storage Requirements	IBM Cloud
7	Machine Learning Model	Get the data from the user and predict the data with tested and trained dataset models	Random forest, Decision Tree, Support Vector Machine.
8	Infrastructure (Server/Cloud)	Application Deployment on Cloud	IBM Cloud

Table-2 Application Characteristics

S.NO	Characteristics	Description	Technology
1	Open-Source Frameworks	Development and Deployment	IBM Cloud, Python
2	Security Implementations	Security provided by IBM Cloud	Workload Protection, Identity and Access Protection
3	Scalable Architecture	Model can be scalable	Python
4	Availability	Available in the cloud	IBM Cloud
5	Performance	High accuracy Performance	Machine Learning Prediction and Classification techniques