Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	15 October 2022
Team ID	PNT2022TMID35275
Project Name	Project - Early Detection of ChronicKidney Disease using Machine Learning
Maximum Marks	4 Marks

Technology Architecture:

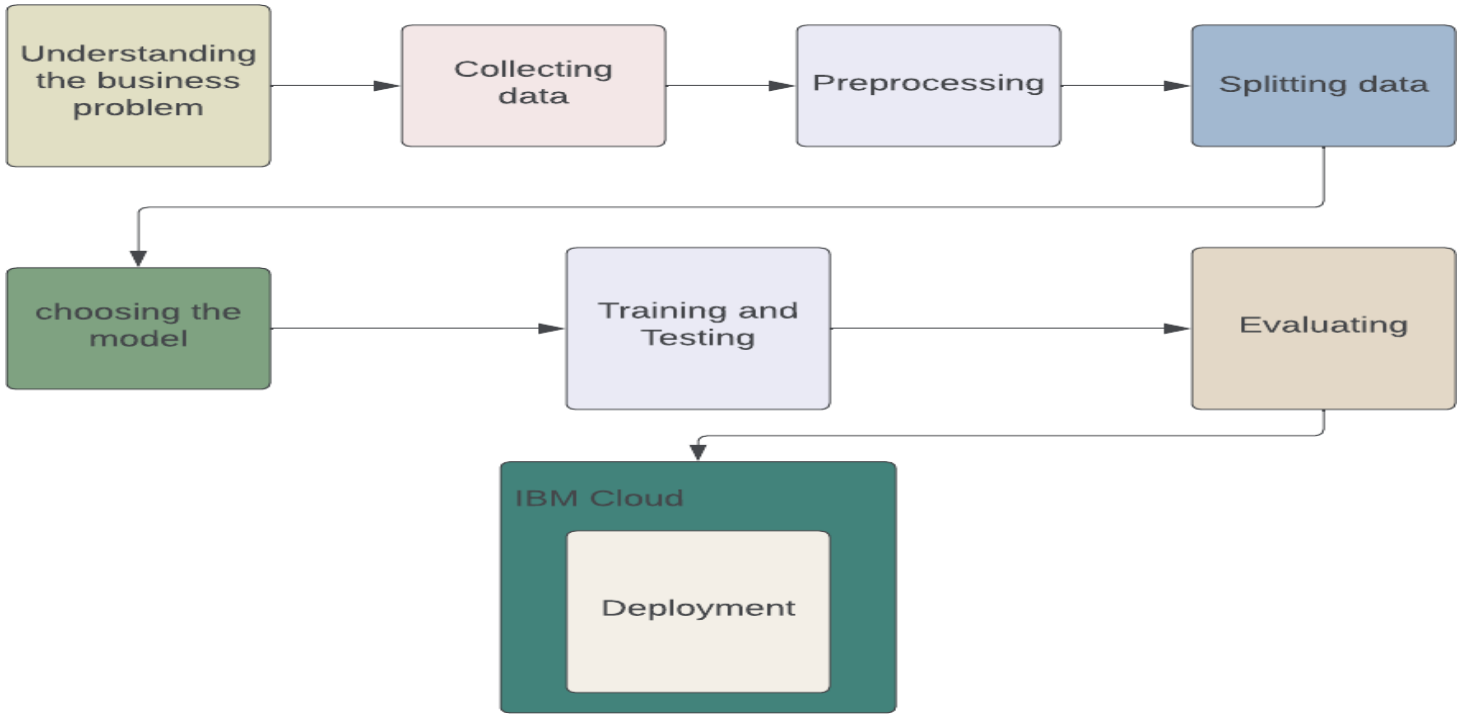

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1	User Interface	How user interacts with application e.g. Web UI	**HTML, CSS,Python Flask**
2	Application Logic-1	Get input from the user	**HTML,CSS,Python Flask**
3	Application Logic-2	Predicts based on the provided input	**Python**
4	Application Logic-3	Displays the predicted Result	**Python,HTML,CSS,Flask**
5	File Storage	File storage requirements	**IBM CLOUD**
6	Machine Learning Model	Random Forest,Regression techniques,Decision tree and SVM	**Prediction and Classification**
7	Infrastructure (Server / Cloud)	Cloud Deployment	**IBM CLOUD**

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1	Open-Source Frameworks	Development and Deployment	**IBM Cloud,Python**
2	Security Implementations	Secutiry provided by IBM Cloud	**Workload Protection,Identityand 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 Predictionand Classification techniques**

References:

[1] https://scikit-learn.org/stable/supervised_learning.html#supervised-learning

[2] https://www.webmd.com/a-to-z-guides/understanding-kidney-disease-basic-information [

[3] https://www.tutorialspoint.com/flask/index.htm

[4] https://www.ibm.com/in-en/cloud-security?utm_content=SRCWW&p1=Search&p4=43700052658150583&p5=e&gclid=CjwKCAjwtKmaBhBMEiwAyINuwJox0TDWprc7hp189HpjBfjAmN0isGe3Etmvr9criDif_P_D-ZckNxoCBJgQAvD_BwE&gclsrc=aw.ds