

ProjectDesignPhase-II
TechnologyStack(Architecture&Stack)

Date	12October2022
TeamID	PNT2022TMID04101
ProjectName	Project-Early Detection of Chronic Kidney Disease using MachineLearning
MaximumMarks	4 Marks

Technical Architecture:

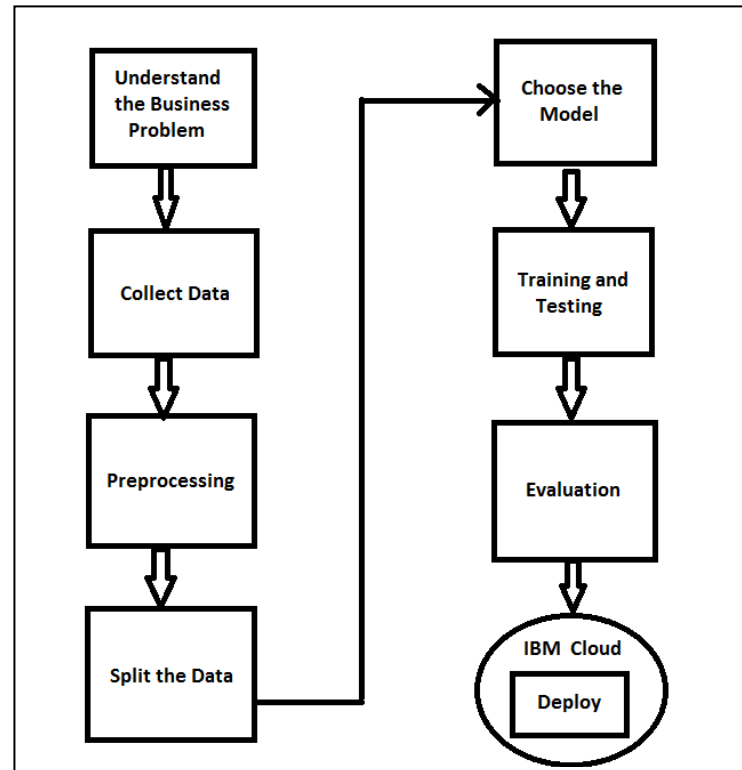


Table-1:Components&Technologies:

S.No	Component	Description	Technology
1	UserInterface	Howuserinteractswithapplicatione.g.WebUI	HTML,CSS,PythonFlask
2	ApplicationLogic-1	Getinputfrom theuser	HTML,CSS,PythonFlask
3	ApplicationLogic-2	Predictsbased ontheprovidedinput	Python
4	ApplicationLogic-3	DisplaysthepredictedResult	Python,HTML,CSS,Flask
5	FileStorage	Filestoragerequirements	IBMCLOUD
6	Machine Learning Model	RandomForest,Regressiontechniques,DecisiontreeandSVM	PredictionandClassification
7	Infrastructure(Server/Cloud)	Cloud Deployment	IBMCLOUD

Table-2:ApplicationCharacteristics:

S.No	Characteristics	Description	Technology
1	Open-SourceFrameworks	Development and Deployment	IBMCloud,Python
2	SecurityImplementations	SecutiryprovidedbyIBM Cloud	WorkloadProtection,Identity andAccessProtection
3	ScalableArchitecture	Model canbe scalable	Python
4	Availability	Availableinthecloud	IBMCLOUD
5	Performance	HighaccuracyPerformance	MachineLearningPredictionandClassificationtechniques

References:

https://www.ibm.com/in-en/cloud-security?utm_content=SRCWW&p1=Search&p4=43700052658150583&p5=e&qclid=CjwKCAjwKmaBhBMEiwAylNuwJox0TDWprc7hp189HpjBfjAmN0isGe3Etmvr9criDif_P_D-ZckNxoCBJgQAvD_BwE&qclsrc=aw.ds

<https://www.webmd.com/a-to-z-guides/understanding-kidney-disease-basic-information><https://www.tutorialspoint.com/flask/index.htm>

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