Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	**8 November 2022**
Team ID	**PNT2022TMID04255**
Project Name	**University Admit Eligibility Predictor**
Maximum Marks	**4 Marks**

Technical Architecture:

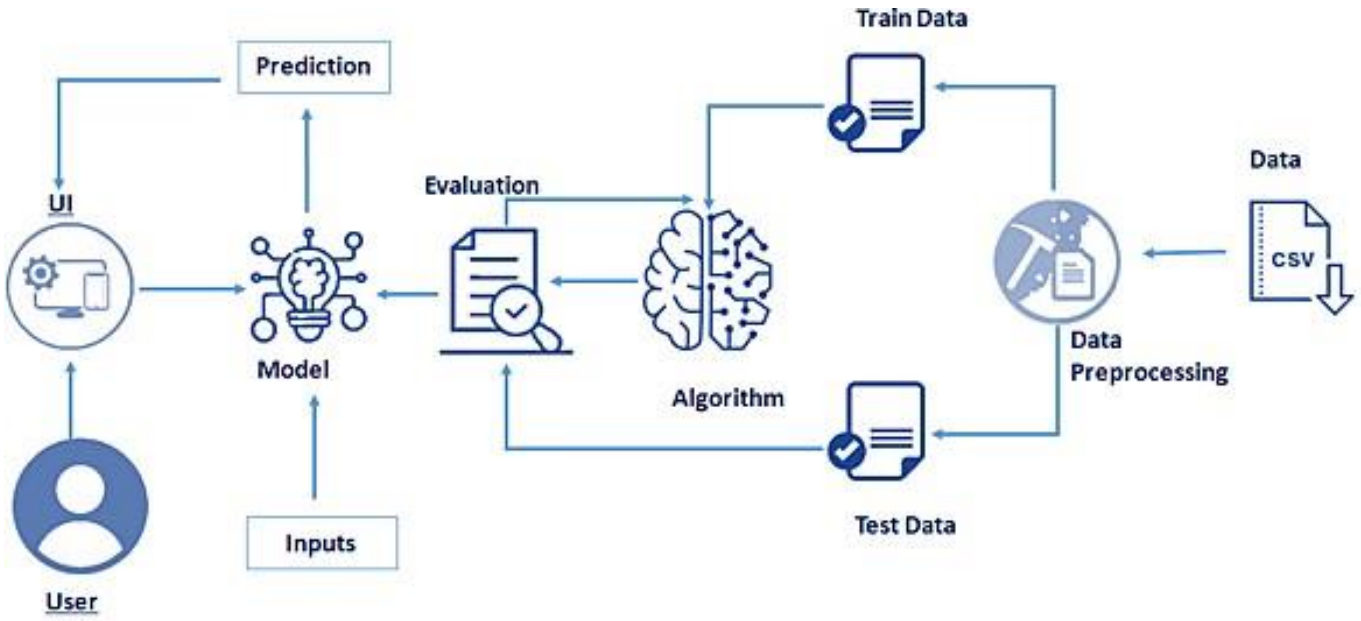

Table 1:Components and Technologies:

S.NO	COMPONENTS	DESCRIPTION	TECHNOLOGY
1.	User interface	User data is provided through the application's front end.	HTML,CSS,JAVASCRIPT
2.	Application logic	The main application procedure	Python
3.	framework	Used to put the codes into effect	Flask
4.	Data base	Storing the student and university data	MYSQL, IBM cloud
5.	Data visualization	Graphic representation of student data and previous university admission	Matplotlib,Seaborn
6.	Cloud database	Storing data Virutually	IBM DB2, IBM cloudant
7.	File storage	Storing the user documents	IBM cloud file storage or local storage
8.	Machine learning model	Model is used for forecasting	Sklearn
9.	Infrastructure	Cloud server configuration for hosting the web app	IBM cloud hosting

Table 2: Application characteristics:

S.NO	CHARACTERISTICS	DESCRIPTION	TECHNOLOGY
1.	Security implementations	confirming the user's data before making a prediction	Cloud authentication services,secure encryption scheme like SHA 256
2.	Scalable architecture	The programme is expandable. even if a large number of users are contributing the data, it can still be managed with ease. There is little chance of a storage crash.	IBM cloud services
3.	Availability	Anyone with access to the internet can use the app. It being saved on the cloud	IBM cloud hosting and IBM load balancer
4.	Performance	The four machine learning models include logistic regression, decision trees, random forests, and linear regression.	Scikit-learn