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

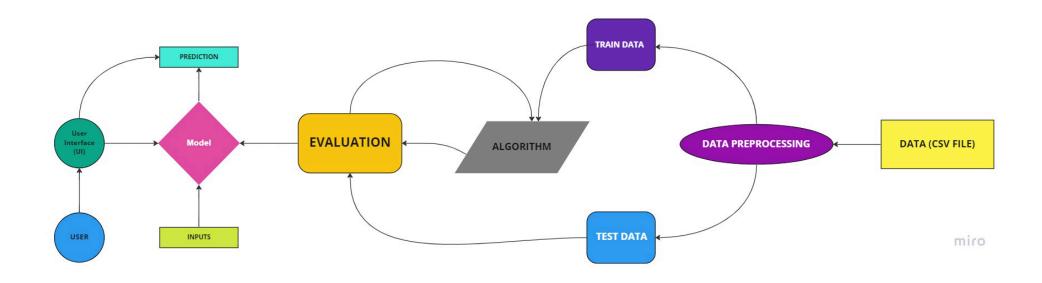| Date	09 November 2022
Team ID	PNT2022TMID04094
Project Name	Project – University Admit Eligibility Predictor
Maximum Marks	4 Marks

Technical Architecture:

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Front-end division of the application	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson
4.	Database	Data Type and configurations	IBM Cloud
5.	Libraries	Importing libraries into data	NumPy, Pandas, Seaborn, Matplotlib
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	Local File System
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9.	External API-2	Purpose of External API used in the application	Aadhar API, etc.
10.	Machine Learning Model	Model is built to predict the chances of a student to get admitted into an university with the criterions put forth	Admission Prediction Model
11.	Training and testing data	Purpose of training and testing data	Logistic Regression algorithm
12.	Accuracy	Accuracy of the tested and trained data	Root Mean Squared Logarithmic Error(RMSLE),Mean Squared Error(MSE),Statistics.
13.	Infrastructure	Cloud Server Configuration	Local.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Python is the open source framework utilized in this project	Flask Framework
2.	Security Implementations	The user profile has been stored in a secured way in the cloud.	SHA-256, Encryptions, IAM Controls
3.	Scalable Architecture	Many computations can be done in a time saving and effective way using ML.	Logistic Regression
4.	Availability	Our web application is available at anytime and at any place	IBM Balancer
5.	Performance	As logistic regression is applied to develop the performance will be more effective	Logistic Regression