

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

Date	03 October 2022
Team ID	PNT2022TMID23271
Project Name	University Admit Eligibility Predictor

Technical Architecture:

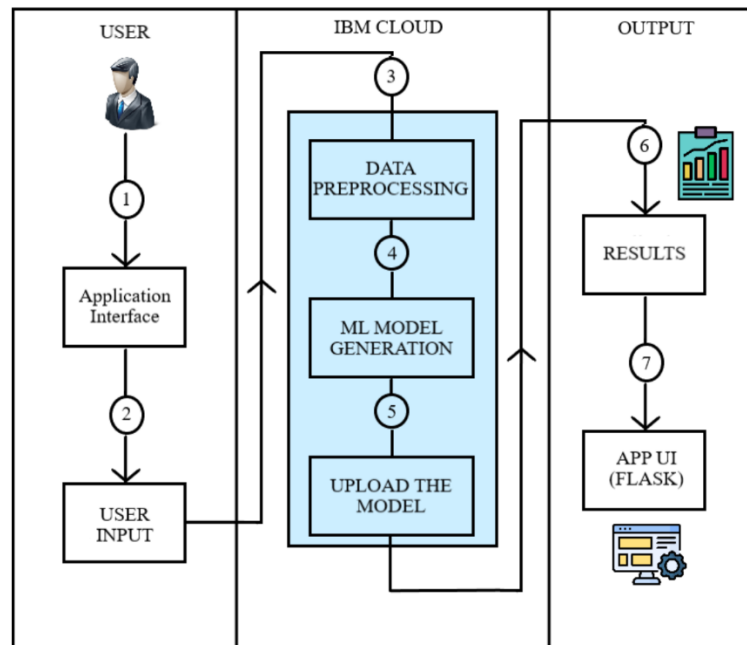


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	An Interface for the User to interact with the Prediction Model	HTML, CSS, JavaScript
2.	Admission Prediction	Training a Machine learning model for predicting University admission.	Jupyter Notebook
3.	Details Form	A Form where the Academic Details of the User have to be Entered which will be taken to the Cloud for Prediction	Python Flask
4.	Results	A Result Window is shown in Which the User can view the Results Obtained through the Prediction	Python Flask
5.	Database	Relational Database Structure to store the User Data	MongoDB
6.	Cloud Database	Database Services on IBM Cloud	IBM Cloudant
7.	Machine Learning Model	To predict the Possibility of Admission	Linear Regression
8.	Infrastructure (Server / Cloud)	Application Deployed on Cloud	IBM Cloud

Table 2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Python Flask, Jupyter Notebook
2.	Scalable Architecture	The 3-Tier Architecture is used with a separate User Interface , Application Layer and Data Tier, which makes it easily Scalable	Python Flask, IBM Watson Assistant , IBM Cloud
3.	Availability	The Predictor is Available across all kinds of Devices at any time in any place wherever Internet Connectivity is possible.	IBM Cloud
4.	Performance	The Performance of the Predictor is Improved by Caching and by frequent Updation of Latest Model for Better Performance	IBM Cloud Internet Services