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

Date	22 October 2022
Team ID	PNT2022TMID10150
Project Name	Project- University Admit Eligibility Predictor
Maximum Marks	4 Marks

Technical Architecture:

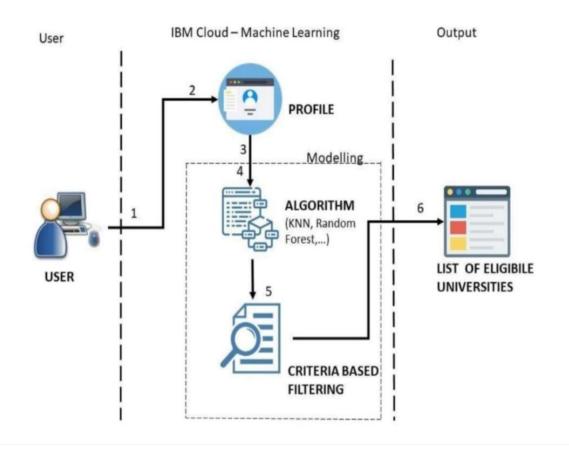


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1	User Interface	How user interacts with application and its features.	HTML, CSS, JavaScript etc.
2	Application Logic-1	The user fills the data into his profile which is then fed into the model to calculate the chances	Python [Jupyter]
3	Application Logic-2	The model predicts the eligibility chances of the user for different universities based on the input data	IBM Watson STT, Python
4	Database	Data of the names of the universities and their corresponding cut-offs and exam scores for admission	Imported through pandas in a csv format
5	Machine Learning Model	Predicts the output using the ML algorithm	KNN, Decision tree, Random Forest, etc.
6	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud	IBM cloud, local cloud

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1	Open-Source Frameworks	Python for backend and Flask for front end	Python, Flask
2	Security Implementations	To ensure the security of the data provided by the user	Encryption, OWASP
3	Scalable Architecture	The model is scalable in nature because its scope can be increased easily	Random forest ML algorithm, Logistic regression
4	Availability	The model is available to anyone, anywhere, anytime	IBM load balancer
5	Performance	The chances are predicted with a greater accuracy	Random forest ML algorithm