

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

Date	31 October 2022
Team ID	PNT2022TMID14375
Project Name	Project- University Admit Eligibility Predictor
Maximum Marks	4 Marks

Technical Architecture

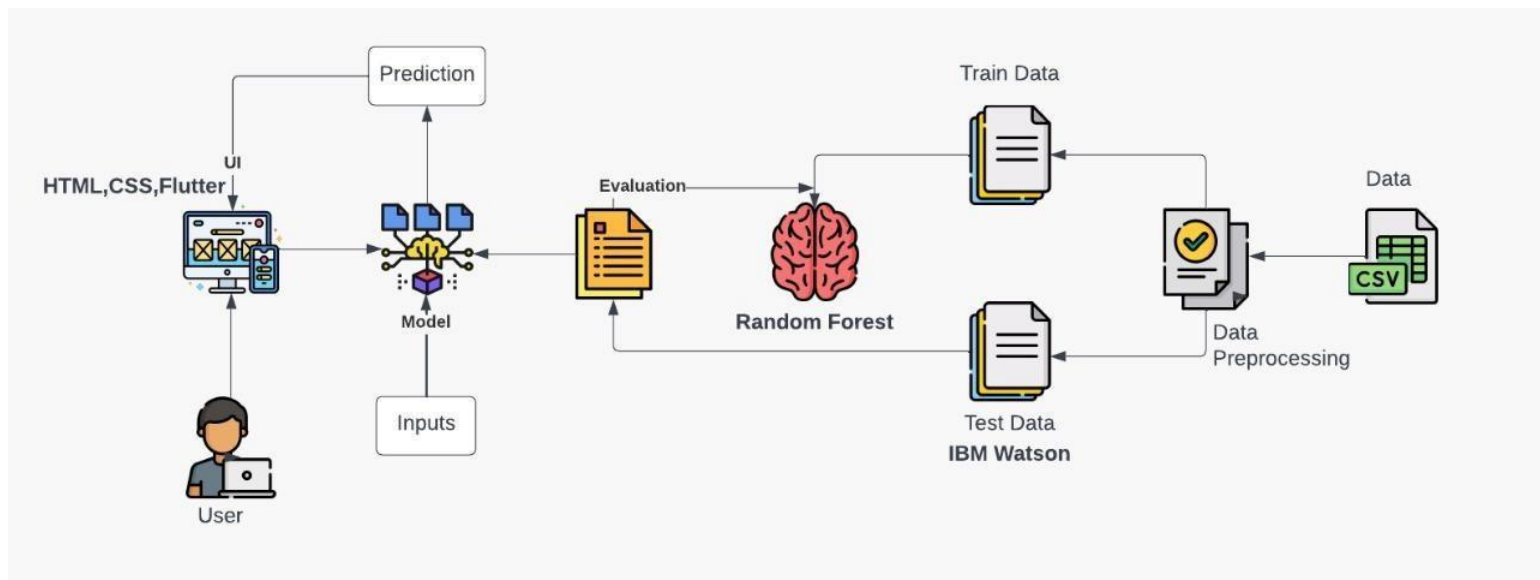


Table-1 : Components & Technologies:

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