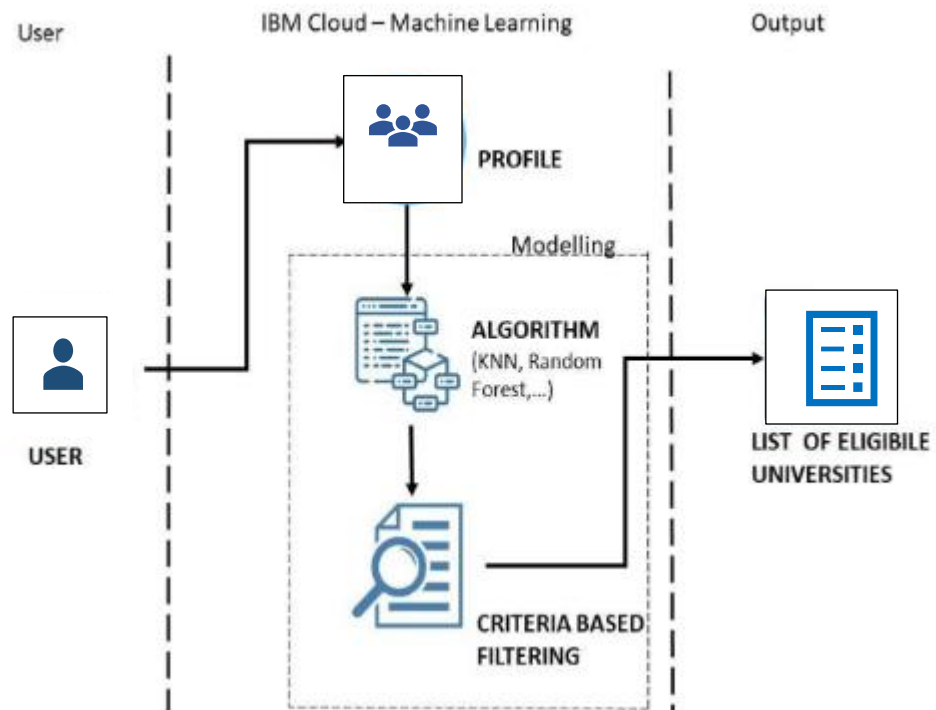


Project Design Phase-II Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID13322
Project Name	Project – University Admit Eligibility Predictor
Maximum Marks	4 Marks

Technical Architecture:



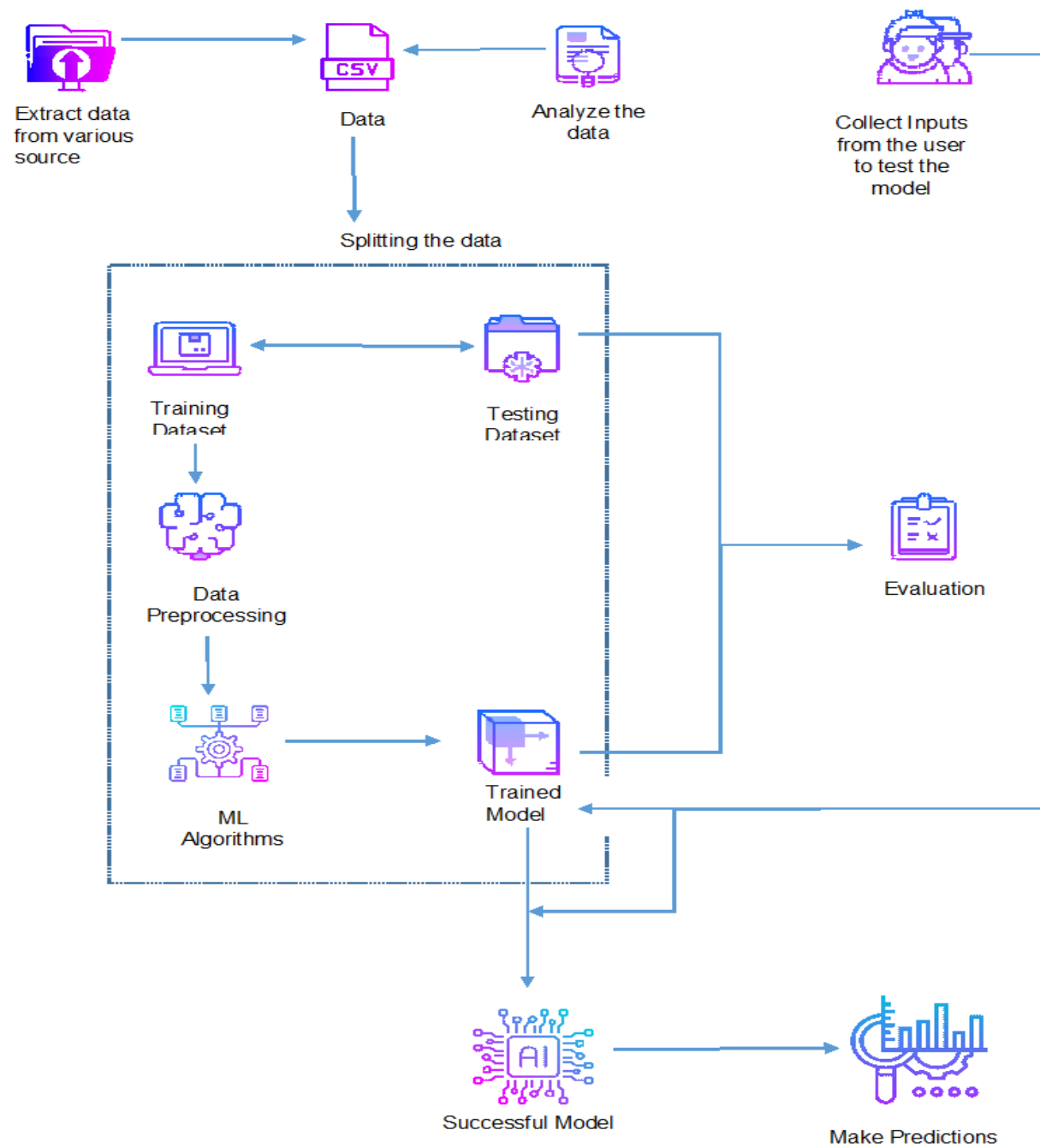


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript 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 Assistant
4.	Dataset	Data Type, Configurations etc.	CSV
5.	Cloud Database	Database Service on Cloud	IBM Cloud.
6.	External API-1	Purpose of External API used in the application	Listing the universities
7.	Machine Learning Model	Purpose of Machine Learning Model	Prediction of eligibility by KNN, Random Forest etc
8.	Infrastructure (Server / Cloud)	Application Deployment on Local System	Local

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask is the opensource Framework that used to connect web with ML model	Python (Flask)
2.	Security Implementations	The system allows users to authenticate and authorize themselves, and only approved users should be able to use the site's services. It has to facilitate two-step verification for the user's data security.	e.g., SHA-256, Encryptions, IAM Controls, OWASP etc.
3.	Scalable Architecture	The system would be able to effectively handle a reasonable volume of user traffic. Also handle several concurrent users' data.	Regression -Random Forest
4.	Availability	The required information can be viewed at any time, from any location, with an internet connection.	IBM load balancer
5.	Performance	Indexes in the database can be used to speed up the search and filter process. The website must quickly respond to the request and handle it efficiently	KNN, Random Forest