

Project Design Phase – II

Technology Stack (Architecture & Stack)

Team ID: PNT2022TMID21686

Project: University Admit Eligibility Predictor

TECHNICAL ARCHITECTURE:

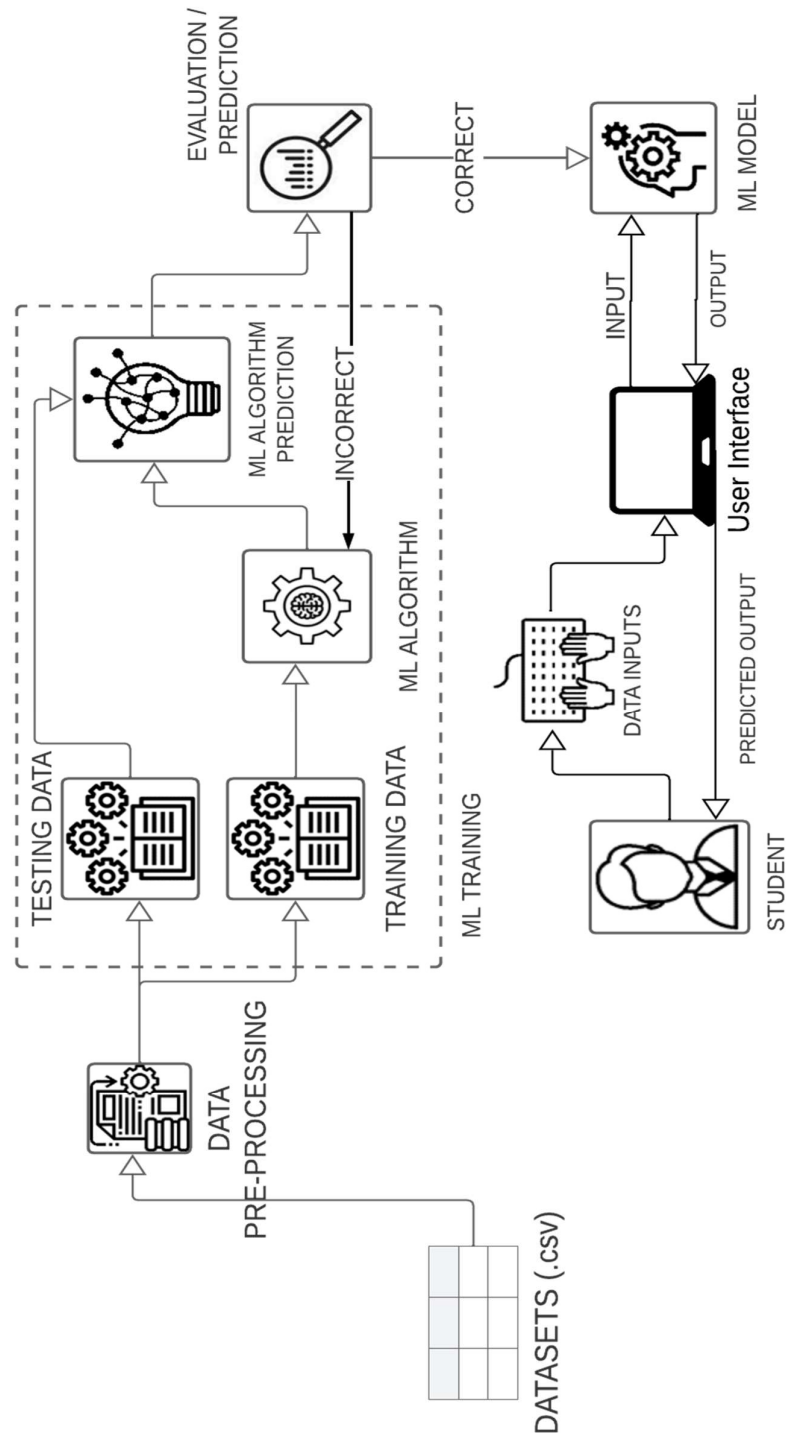


Table 1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	User Interacts with the web-app in Web UI.	HTML, CSS, JS, Frameworks, etc.,
2.	Application Logic	By collecting and analyzing the datasets and history records, training a model that predicts at a possible high accuracy.	Machine Learning using Python
3.	Database	To store and retrieval of necessary data.	MySQL / SQLite3
4.	Cloud Database	Database Services over the Cloud.	IBM DB2, IBM Cloudant, etc.,
5.	External API-1	Web APIs are available to developers and offers users with minimal restrictions	Web API, etc.,
6.	External API-2	Access is limited to authorized clients with official licenses, and thus security measures tend to be stronger.	Partner API, etc.,
7.	Machine Learning Model-1	Regression models always target a prediction value which is based on independent variables. It is used to calculate the relationship between two quantitative variables	Linear Regression Model, etc.,
8.	Machine Learning Model – 2	Classifiers also predicts the target output based on the multiple features.	Random Forest Classifier, etc.,
9.	Infrastructure	Application Deployment on Local System/Cloud Server. Local Serve: HTTP Server Cloud Server: IaaS, SaaS	Local System, Cloud Foundry, IBM Cloud.