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

Date	03 October 2022
Team ID	PNT2022TMID18243
Project Name	Project-University Eligibility Criteria Predictor
Maximum Marks	4 Marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

Example: Order processing during pandemics for offline mode

Reference: https://developer.ibm.com/patterns/ai-powered-backend-system-for-order-processing-during-pandemics/

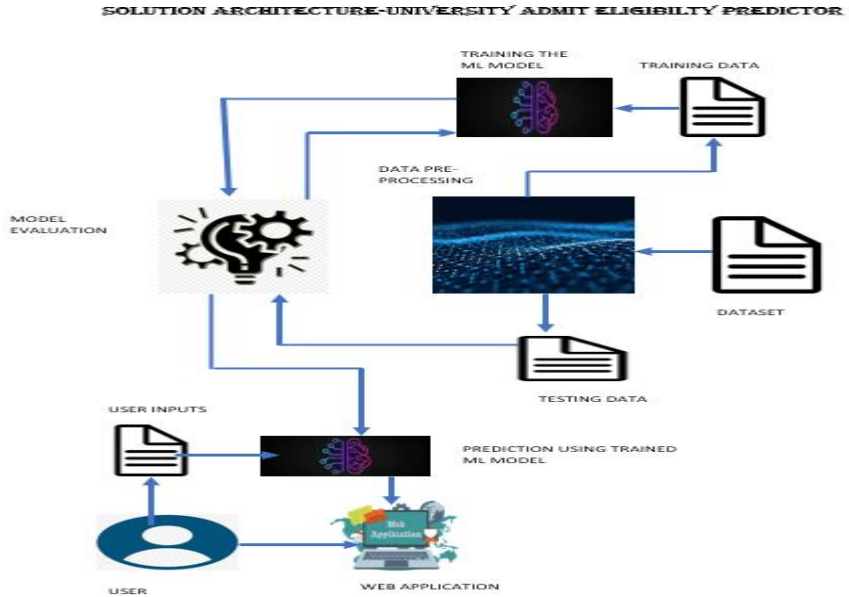

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	The user interacts with the application through a Web UI	HTML, CSS, Python, Flask
2.	Application Logic-1	Logic for collecting the input from the user	Java / Python
3.	Application Logic-2	Integrating Machine Learning model with our application	Python/Java
4.	Application Logic-3	Logic for a process in the application	Python/Java
5.	Database	Data Type, Configurations,Numeric Data etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	File Storage	File storage requirements	IBM Block Storage or Other Storage Service or Local Filesystem
8.	External API-1	Purpose of External API used in the application	IBM Weather API, etc.
9.	External API-2	Purpose of External API used in the application	Aadhar API, etc.
10.	Machine Learning Model	Predictive modelling is a mathematical process used to predict future events or outcomes by analysing patterns in a given set of input data.	Object Recognition Model, etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System Local Server Configuration: Built-in Flask web server	Flask,Web server etc…

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask	Micro web framework with python
2.	Security Implementations	Http authentication, Session based authentication	e.g. Flask security
3.	Scalable Architecture	Size is everything, and Flask's status as a microframework means that you can use it to grow a tech project such as a web app incredibly quickly. Its simplicity of use and few dependencies enable it to run smoothly even as it scales up and up.	Flask
4.	Availability	Higher compatibility with latest technologies and allows customization	Flask
5.	Performance	Integrated support for unit testing. ● RESTful request dispatching. ● Uses Jinja templating. ● Support for secure cookies	Flask

References:

https://c4model.com/

https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/

https://www.ibm.com/cloud/architecture

https://aws.amazon.com/architecture

https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d