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

Technical Architecture:
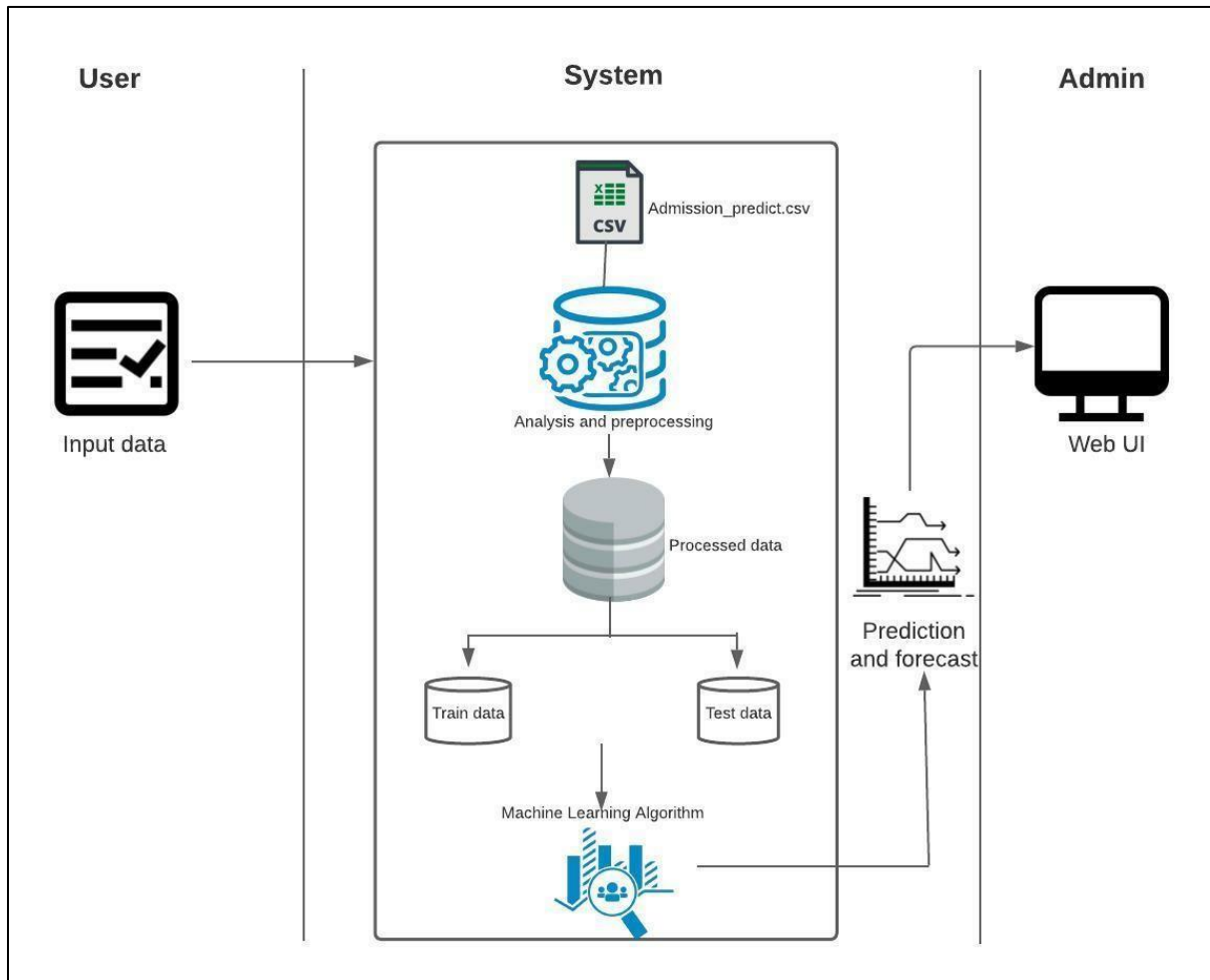

Table-1: Components and Technologies:

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	Python
3.	Application Logic-2	Integrating Machine Learning model with our application	Python
4.	Database	Numeric data	MySQL
5.	File Storage	To store files such as prediction report	Local Filesystem

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.	Predictive Modelling
11.	Infrastructure (Server)	Application Deployment on Local System Local Server Configuration: Built-in Flask web server	Flask, Web server

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	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