

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

Date	5 November 2023
Team ID	Team-592881
Project Name	Disease Prediction Using Machine Learning
Maximum Marks	4 Marks

Technical Architecture:

Technology Stack

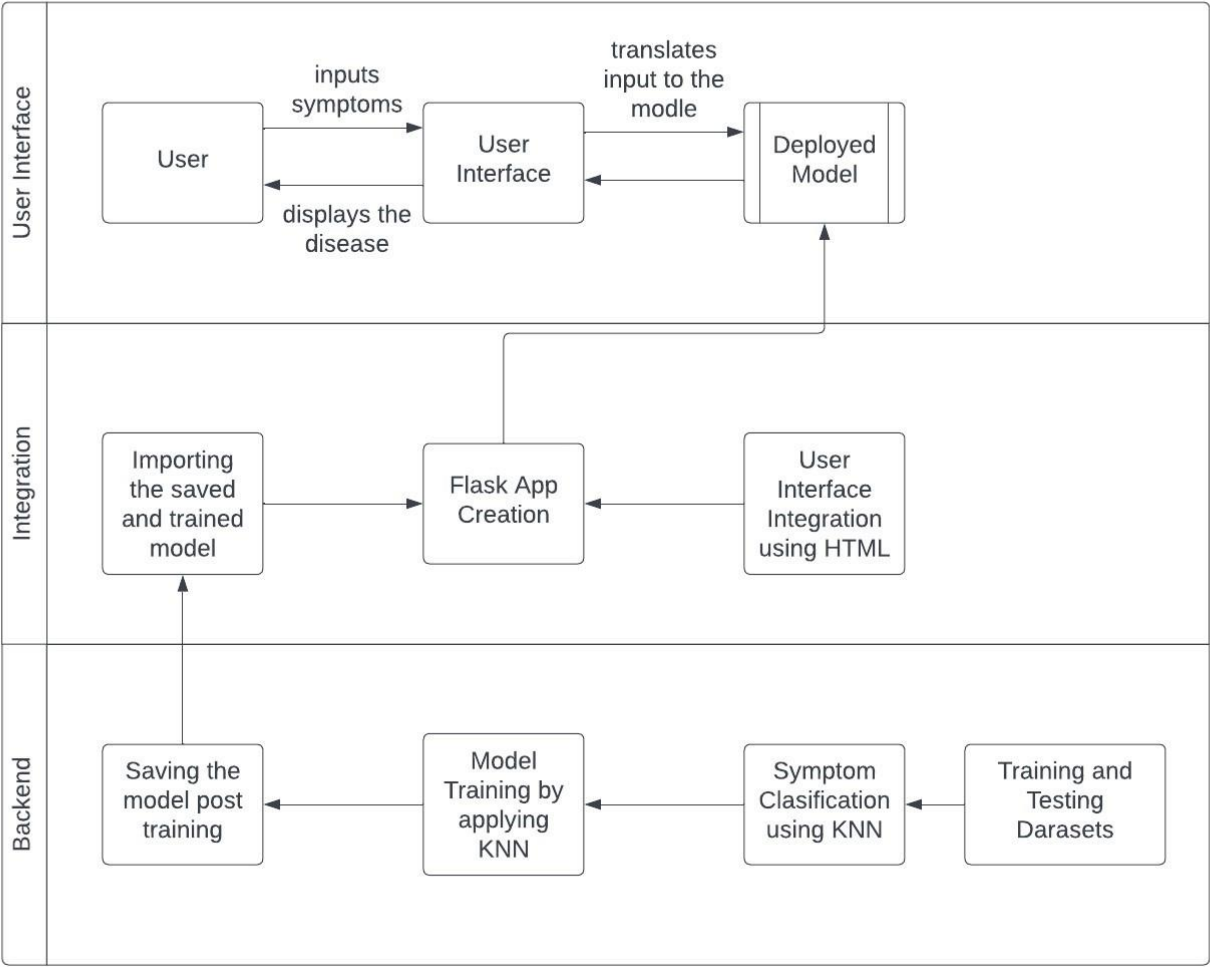


Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI	HTML
2.	Application Logic-1	Logic for a process in the application	Python
3.	Database	Collect the Dataset Based on the Problem Statement	File Manager
4.	File Storage/ Data	File storage requirements for Storing the dataset	Local System
5.	Frame Work	Used to Create a web Application, Integrating Frontend and Back End	Python, Flask
6.	Deep Learning Model	Purpose of Model	KNN, Transfer Learning
7.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: File Explorer Windows	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Python's Flask
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	SHA-256
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Microservices)	Kubernetes. Microservices architecture
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Load balancing
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Content Delivery Networks (CDNs)