Project Planning Phase

Technology Stack (Architecture & Stack)

Date	26 October 2023
Team ID	593524
Project Name	Visualizing and Predicting Heart Diseases with an Interactive Dashboard
Maximum Marks	4 Marks

Technical Architecture:

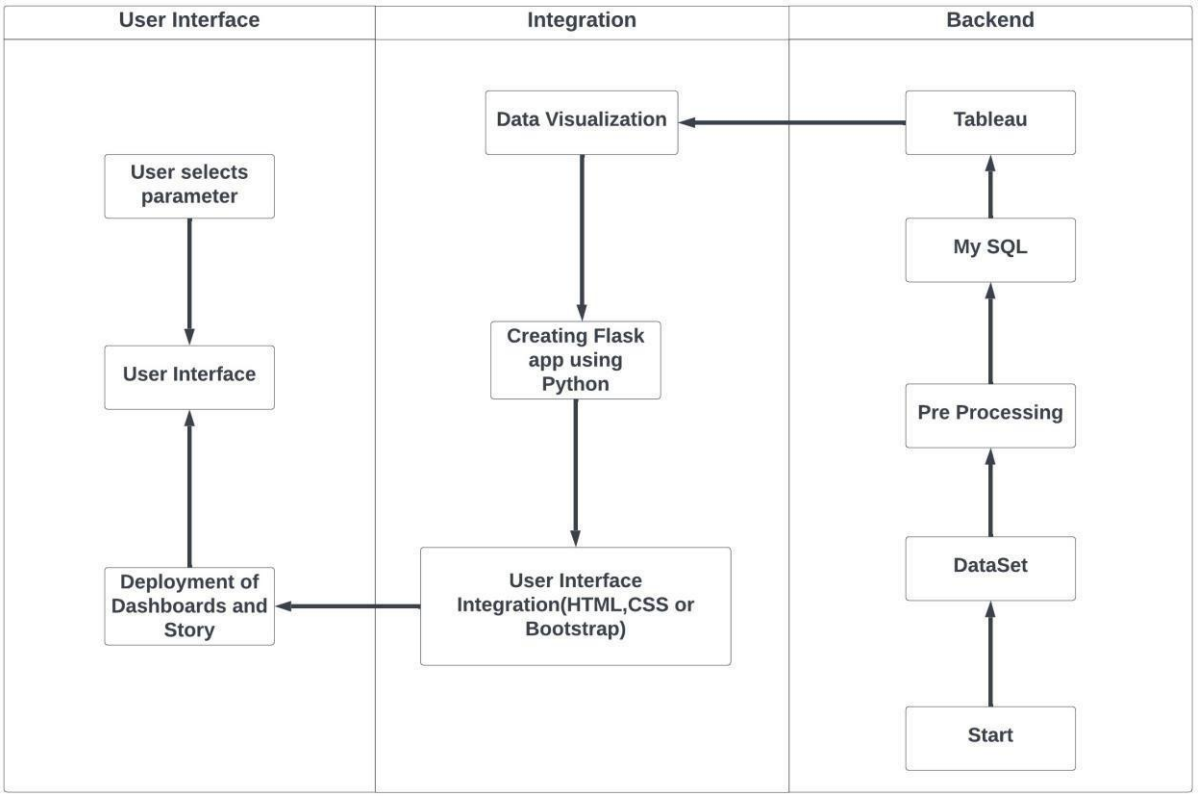

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI	HTML, CSS, JavaScript / Angular JS / React JS.
2.	Database	Collect the Dataset Based on the Problem Statement	File Manager, MySQL, NoSQL, etc.
3.	File Storage/ Data	File storage requirements for Storing the dataset	Local System, Google Drive Etc
4.	Frame Work	Used to Create a web Application, Integrating Frontend and Back End	Python Flask, Tableau Public etc
5.	Data Visualization	Used to create Visualizations and Dashboards,Generating Insights	Tableau
6.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

A) Application Deployment in Local System:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Utilization of open-source frameworks in the project	Python's Flask

B) If Application Deployment in cloud:

S.No	Characteristics	Description	Technology
1.	Cloud Deployment	Utilization AWS Architecture	AWS Cloud Services
2.	Security Implementations	Implementation of security and access controls	Default Security group
3.	Scalable Architecture	Architectural design that justifies scalability	Multiple Availability Zones Deployment
4.	Availability	Ensuring high availability of the application	Load balancers (or) distributed server setup
5.	Performance	Considerations for optimizing application performance	Caching, use of Content Delivery Networks (CDN)