

## Project Design Phase-I

### Solution Architecture

Date	23 October 2023
Team ID	591290
Project Name	Visualizing and Predicting Heart Diseases with an Interactive Dash Board
Maximum Marks	4 Marks

#### Solution Architecture:

The solution involves developing an innovative interactive dashboard for visualizing and predicting heart diseases. The architecture for "Visualizing and Predicting Heart Diseases with an Interactive Dashboard" involves a seamless flow of data and insights. Data collection involves gathering of information from various healthcare sources, while a MySQL database stores and manages the data. Tableau connects to the database, enabling real-time data updates and integration. Machine learning models are trained and deployed to predict heart diseases, with testing ensuring their accuracy. The interactive dashboard, accessible via a web-based client interface, utilizes Tableau and web technologies to create user-friendly visualizations. These visualizations allow patients and healthcare professionals to explore and analyze data while ensuring security and compliance with healthcare regulations. Regular monitoring, data analysis, and feedback mechanisms facilitate continuous improvement and maintain system performance, making this architecture a robust solution for healthcare data visualization and prediction. In the end, this method helps patients receive more expert care while allowing users to maintain their heart health.

Our solution on visualizing and predicting heart diseases using a creative dashboard will effectively increase the quality of service to heart patients. It includes:

- Data collection
- Connecting dataset with the MySQL and Tableau
- Testing and Training
- Creating effective visualisations
- Analysing the data
- Website
- Client

FlowChart

Solution Architecture diagram

