

## **Project Design Phase**

### **Solution Architecture**

Date	18-02-2026
Team ID	LTVIP2026TMIDS88080
Project Name	Heart Disease Analysis: Identifying Risk Factors Using Tableau.
Maximum Marks	4 Marks

#### **Solution Architecture**

Solution architecture is a structured process that bridges the gap between healthcare problems and data-driven technology solutions.

Its goals are to:

- Identify the most suitable analytical and visualization tools to generate heart disease-related insights.
- Describe the structure, characteristics, behaviour, and analytical flow of the system to stakeholders.
- Define features, data processing stages, and analytical requirements.
- Provide clear specifications for how the solution is developed, managed, and delivered.

The solution architecture for this project explains how the Heart Disease Dataset (provided dataset) is processed, analysed, and visualized using Tableau. The architecture includes direct data import (CSV file), data preprocessing and cleaning, transformation within Tableau, creation of interactive dashboards and stories, and presentation of insights to stakeholders.

This approach ensures a scalable, reusable, and easy-to-maintain solution for visual analysis of heart disease patterns, risk factors (such as age, gender, diabetes, smoking, and stroke), and overall health trends.

#### **Example – Solution Architecture Diagram:**

Architecture and Data Flow of the Heart Disease Analysis Tableau Visualization Project.

