Project development phase

Date	02 march 2026
Team ID	LTVIP2026TMIDS91241
Project Name	HeartDisease Analysis
Maximum Marks	15 Marks

1. Data Connectivity

The system connects to the heart disease dataset using structured data files such as CSV. The data is loaded into the analysis environment and connected to Tableau for visualization. This ensures real-time interaction with the dataset. The connectivity allows seamless data flow between backend processing and frontend dashboards.

Link of dataset:

https://drive.google.com/file/d/15ujsgAL8_vhkogwlegRYfHhoEcD4EQes/view?usp=sharing

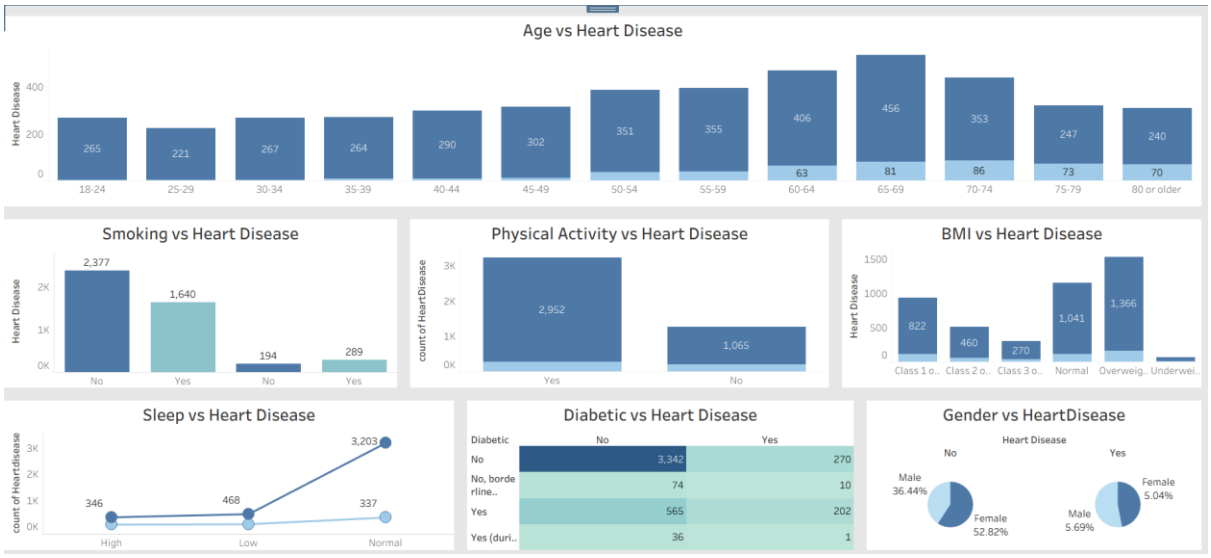
2. Data Preparation

The raw dataset is cleaned by handling missing values, removing duplicates, and correcting inconsistent data. Feature engineering is performed by creating meaningful categories such as age groups and BMI levels. Data transformation ensures the dataset is suitable for analysis and visualization. This step improves the accuracy and reliability of insights.

3. Dashboard

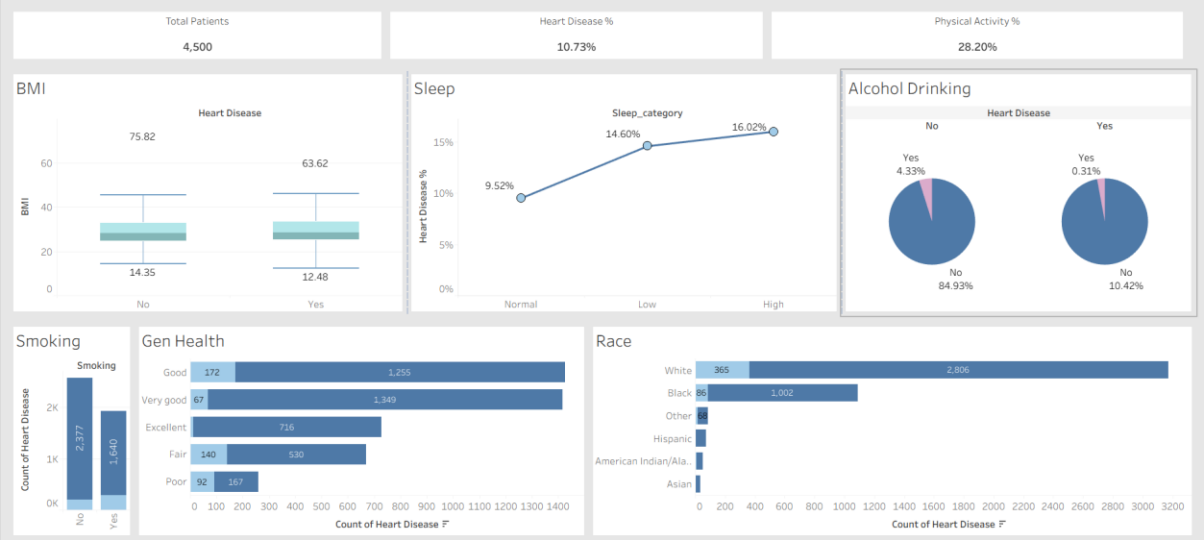
Scenario 1 – Demographic & Lifestyle Analysis

This scenario focuses on understanding how demographic factors and lifestyle habits impact heart disease. It analyzes attributes such as age, gender, smoking, alcohol consumption, and physical activity. The dashboard helps identify high-risk groups based on daily habits and population segments. This provides an overview of who is more vulnerable to heart disease.



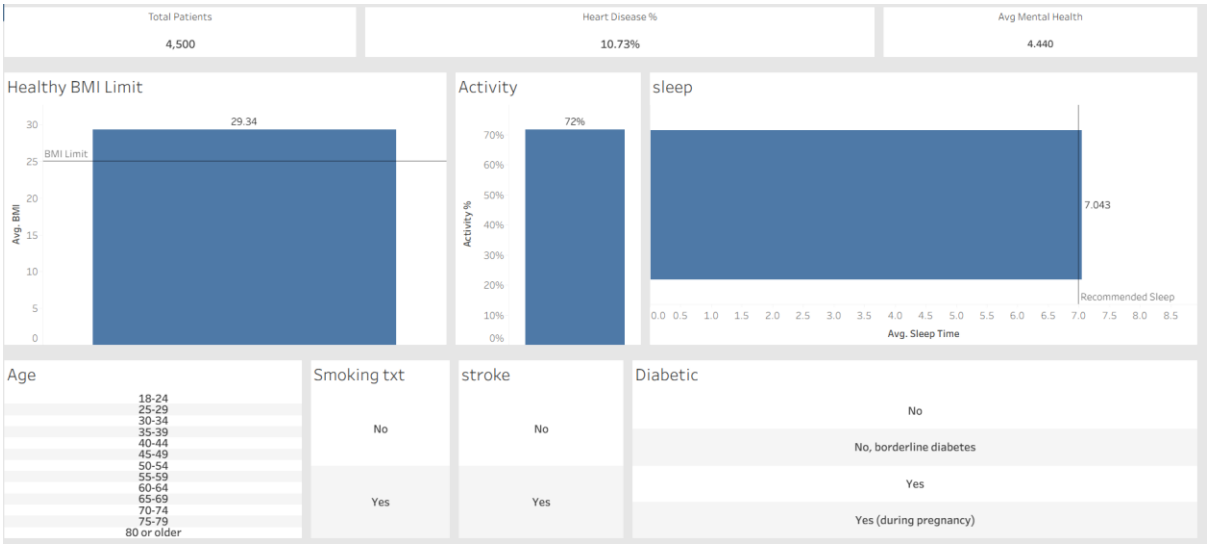
Scenario 2 – Health Indicators Analysis

This scenario analyzes key health parameters such as BMI, sleep duration, blood pressure, and cholesterol levels. It helps understand how these medical indicators influence heart disease risk. The dashboard highlights unhealthy patterns and their correlation with heart problems. This supports early detection through measurable health metrics.



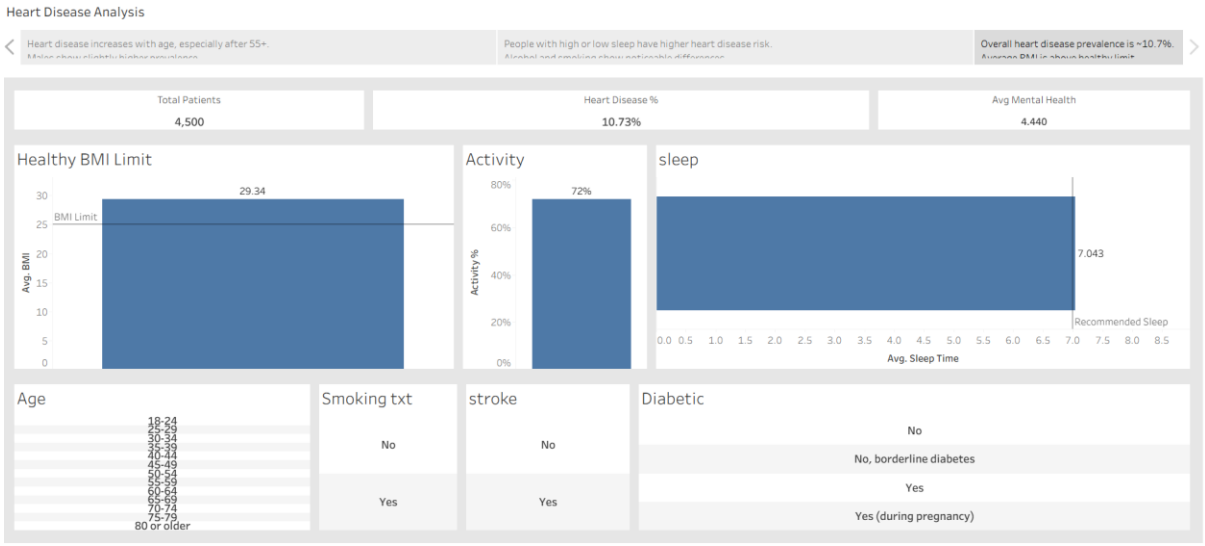
Scenario 3 – Risk & Trend Analysis

This scenario focuses on overall heart disease risk and trends across different user groups. It compares multiple factors to identify common risk combinations. The dashboard shows patterns over time and helps predict future risk levels. This scenario supports decision-making and preventive actions.



4. Story

A story is created using Tableau to present insights in a narrative format. The story explains key findings step by step using visuals and text. This helps users interpret complex data easily. It acts as a guided explanation of heart disease trends and risks.



5. Creativity (Font and Style)

The project uses consistent fonts, colors, and layouts to improve readability and user experience. A clean and minimal design style is followed to avoid clutter. Visual elements such as icons and animations enhance engagement. This creative approach makes the dashboards more professional and user-friendly.