

Project Design Phase
Proposed Solution Template

Date	15 February 2026
Team ID	LTVIP2026TMIDS24884
Project Name	Heart Disease Analysis
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Heart disease is one of the leading causes of death, and healthcare professionals often face difficulty in analyzing large health datasets to identify risk patterns. There is a lack of interactive and visual systems to help detect high-risk groups early.
2.	Idea / Solution description	The proposed Heart Disease Analysis System is a web-based analytical platform that uses Python (Flask), MySQL, and Tableau to visualize heart disease data. It provides interactive dashboards that help doctors and health authorities analyze risk factors like age, BMI, cholesterol, smoking, and diabetes.
3.	Novelty / Uniqueness	Unlike traditional static reports, this system provides dynamic filtering, real-time visual analytics, and structured dashboards for medical data interpretation. It integrates data storage, backend processing, and visualization in a single platform.
4.	Social Impact / Customer Satisfaction	The system improves early awareness and prevention of heart disease by helping doctors and policymakers identify high-risk groups. It enhances healthcare decision-making and promotes preventive care, thereby improving patient outcomes.
5.	Business Model (Revenue Model)	The system can be offered as a subscription-based healthcare analytics tool for hospitals and clinics. It can also be licensed to government health departments or deployed as a SaaS model with tier-based access.
6.	Scalability of the Solution	The solution follows a 3-tier architecture and can be deployed on cloud platforms. It can scale to handle large datasets, integrate machine learning prediction models in the future, and support multiple hospitals or regions simultaneously.