

Project Design Phase-I Proposed Solution Template

Date	24 September 2022
Team ID	PNT2022TMID23310
Project Name	Project - Visualizing and Predicting Heart Diseases with an Interactive Dash Board
Maximum Marks	2 Marks

Proposed Solution Template:

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

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Healthcare needs technology to predict the reason of heart disease to reduce them in near future and be prepared to tackle the medical whereabouts.
2.	Idea / Solution description	The concept behind the encountered solution is to suggest an interactive dashboard for visualising and forecasting cardiac problems, where the user may observe the analysis of people medical report and the anticipated outcome. IBM Cognos will be used to visualize thereby showcasing in a dashboard. The data set will first be examined and prepped. Several machine learning techniques, including the Support Vector Machine, Decision tree, Naive Bayes, Random forest, K-Nearest Neighbour, and Neural networks, can be used to predict cardiac disease. We discovered that these algorithms were each applied separately based on our study. To achieve greater accuracy than is feasible, our system combines all of these algorithms with the ideas of neural networks. The average forecast from the aforementioned algorithms will be our final outcome. We anticipate achieving an accuracy of >90% as we mix multiple algorithms.
3.	Novelty / Uniqueness	The suggested system is innovative in that it educates people about their bodies on a non-medical level and offers advice. This will enable them to take the necessary safeguards and pay attention to their body's needs. Based on gender ,age , chest pain ,blood pressure, cholesterol level etc a suggested study relating to cardiac arrest

		prediction utilising the real-time dataset is categorised. We intend to employ techniques to determine the probabilities of risk classification based on age , gender, chest pain ,blood pressure ,cholesterol level etc
4.	Social Impact / Customer Satisfaction	It helps with disease prediction at an early stage and frequently alerts the user to his current health status. Earn money by selling dashboards to medical, diagnostic, and clinical facilities. Effective management of heart disease can be achieved through a mix of medication, lifestyle modifications, and, occasionally, surgery.
5.	Business Model (Revenue Model)	This interactive dashboard for heart disease prediction can be installed in hospitals and healthcare facilities, allowing for quick analysis. Predicted outcomes can be utilised to avoid, and hence lower, the need for expensive surgical procedures. Companies who make smartwatches may use this dashboard as a tool.
6.	Scalability of the Solution	We show that this method can produce predictions with the maximum degree of accuracy, allowing it to be successfully applied in the healthcare industry.