Project Design Phase-I
Proposed Solution Template

Date	3 October 2022
Team ID	PNT2022TMID32881
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)	Among various life-threatening diseases, heart disease has garnered a great deal of attention in medical research. The diagnosis of heart disease is a challenging task, which can offer automated prediction about the heart condition of patient so that further treatment can be made effective. The diagnosis of heart disease is usually based on signs, symptoms and physical examination of the patient. There are several factors that increase the risk of heart disease, such as smoking habit, body cholesterol level, family history of heart disease, obesity, high blood pressure, and lack of physical exercise.
2.	Idea / Solution description	Exploratory Data Analysis (EDA) is a method to analyse data using advanced techniques to expose hidden structure, enhances the insight into a given dataset, identifies the anomalies and builds parsimonious models to test the underlying assumptions. Exploratory Data Analysis (EDA) is classified into Graphical or non-graphical and Univariate or multivariate Univariate data consider one data column at a time while multivariate method considers more than two variables while analysing.
3.	Novelty / Uniqueness	If three-dimensional (3D) imaging of congenital heart disease (CHD) could be more useful than two-dimensional (2D) visualisation for clarifying CHD anatomy and raising awareness. Stakeholders including the government and health insurance providers could gain from disease prediction. Patients who are at risk for certain illnesses or disorders can be identified.
4.	Social Impact / Customer Satisfaction	Generate Revenue by selling dashboards to Hospitals ,Diagnostics & Clinical centres. Smartwatch companies can use this dashboard as an application.

5.	Business Model (Revenue Model)	The Successful Business Strategies to Prevent Heart Disease and Stroke Toolkit provides information, materials, and tools that state programs can reference and distribute to businesses, primarily through employer and professional organizations. The Toolkit also assists state programs in addressing these CVH priority areas: • Providing health care coverage for employees and their families that includes primary and secondary prevention services addressing heart disease and stroke, as well as rehabilitation services for heart attack and stroke survivors. • Assuring detection and follow-up services with employees at the worksite to control high blood pressure and cholesterol. • Promoting adequate cost coverage or reimbursement for prescription drugs required
6.	Scalability of the Solution	Using this approach, we show that up to 98% accuracy is achieved.