Project Design Phase-I
Proposed Solution

Date	19 September 2022
Team ID	PNT2022TMID12915
Project Name	Visualizing And Predicting Heart Diseases with An Interactive Dash Board
Maximum Marks	2 Marks
Project Members	Sree Nanda R, Nithish V, Raja Keerthana N, Suriya Sankameswaran S

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Visualizing And Predicting Heart Diseases with An Interactive Dash Board; using the dataset to predict which patients are most likely to suffer from a heart disease in the near future using the features given
2.	Idea / Solution description	The risk factors that cause heart disease is considered and predicted using K-means algorithm and the analysis is carried out using a publicly available data for heart disease. 8 attributes such as age, chest pain type, blood pressure, blood glucose level, ECG in rest, heart rate and four types of chest pain are considered. To predict the heart disease, K-means clustering algorithm is used along with data analytics and visualization tool.
3.	Novelty / Uniqueness	K-means clustering is one of the simplest and popular unsupervised machine learning algorithms. The role of exploratory data using tableau provided a visual appealing and accurate clustering experience.
4.	Social Impact / Customer Satisfaction	Heart stroke and vascular disease are the major cause of disability and premature death. Chest pain is the key to recognize the heart disease. By predicting the possibility of hear diseases in at- risk patients, many lives can be saved.
5.	Business Model (Revenue Model)	This would be highly useful in hospitals and other related healthcare facilities.
6.	Scalability of the Solution	Increasing the size of dataset would significantly improve the accuracy. A better initialization technique in K- means clustering algorithm can also improve the accuracy.