

Project Design Phase I

Proposed Solution Template

Team Members	1. Ramya V 2.Ridhanya G 3.Swetha M 4.Tannusri S R
Project name	Project-VISUALIZING AND PREDICTING HEART DISEASE WITH AN INTERACTIVE DASHBOARD
Maximum marks	2Marks

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)	The user need a way to identify whether he/she is affected by Heart disease, improve diagnosis & quality of care, assists in predicting diseases, analyzing symptoms, providing appropriate medicines, minimizing cost, extending the life span and reduces the death rate of heart patients.
2.	Proposed Solution	The use of analytics in healthcare improves care by facilitating preventive care and EDA is a vital step while analyzing data. In this paper, the risk factors that causes heart disease is considered and predicted using K-means algorithm and the analysis is carried out using a publicly available data for heart disease. The dataset holds 209 records with 8 attributes such as age, chest pain type, blood pressure, blood glucose level, ECG in rest, heart rate and four types of chest pain. To predict the heart disease, K-means clustering algorithm is used along with data analytics and visualization tool. The paper discusses the pre-processing methods, classifier performances and evaluation metrics. In the result section, the visualized data shows that the prediction is accurate

		care, minimizing cost, extending the life span and reduces the death rate of heart patients
3.	Novelty / Uniqueness	The huge volume of data is used to make decision which is more accurate than intuition. Exploratory Data Analysis (EDA) detects mistakes, finds appropriate data, checks assumptions and determines the correlation among the explanatory variables. In the context, EDA is considered as analyzing data that excludes inferences and statistical modelling. Analytics is an essential technique for any profession as it forecast the future and hidden pattern. Data analytics is considered as a cost effective technology in the recent past and it plays an essential role in healthcare which includes new research findings, emergency situations and outbreaks of disease.
4.	Social Impact / Customer Satisfaction	Heart disease is not only affecting the older people ,it also affects the young people by causing sudden heart attack without any symptoms. This causes immediate death of the person in worst cases. So when a person is found prone to heart attack ,it can be found easily and they can be given immediate treatment and saved out of danger.
5.	Business Model (Revenue Model)	There are many ways to produce revenue from this project. The most common way is to great application in smart phone, smart watch and other smart devices.
6.	Scalability of the Solution	When is it connected to smart watch , if a person is prone or at a risk of getting heart disease , It can be diagnosed immediately and the patient can be given treatment immediately.

