

PROJECT DESIGN PHASE - I

PROPOSED SOLUTION

Date	21 September 2022
Team ID	PNT2022TMID54045
Project Name	Visualizing and Predicting Heart Diseases with an Interactive Dash Board
Maximum Marks	2 Marks

S.NO.	PARAMETER	DESCRIPTION
1.	Problem Statement	<ul style="list-style-type: none">• 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.	Idea / Solution description	<ul style="list-style-type: none">• We're going to predict heart disease by analyzing symptoms which are causing heart disease.• The prediction of heart disease is made with 14 independent features like age, chest pain type, blood pressure, blood glucose level, ECG in rest, FBS over 120, EKG results, Max HR,ST depression, Slope of ST, Number of vessels fluro, Thallium, heart rate and four types of chest pain and the habitual of physical exercise.• An informative & creative dashboard can be created to present the data and utilize it for future use.• Dashboard provide Visual insights which assists in predicting diseases, improving diagnosis, analyzing symptoms, providing appropriate medicines, improving the quality of care, minimizing cost, extending the life span and reduces the death rate of heart patients
3.	Novelty / Uniqueness	<ul style="list-style-type: none">• The use of analytics in healthcare improves care by facilitating preventive care and visually represented data provide various insights easily. It is cost efficient. Earlier prediction is very helpful in reducing mortality rate. Moreover on the basis of patient heart condition, patient's treatment is very easy for the doctors it can be integrated with any real time systems such as app & smartwatch.

4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> • It will reduce the mortality rate due to heart disease. Heart prediction can be done easier and earlier by visual analytics. • As it is cost efficient, it is preferred by the most of the customers. • Most importantly, it is very helpful for doctors to give treatments according to the patients conditions and it's preferred by the doctors as it saves time.
5.	Business Model	<ul style="list-style-type: none"> • There are 2 ways to generate a revenue from this project by creating product model. First one by introducing app for predicting heart disease or it can be integrated with smart watch for producing more efficient model.
6.	Scalability of the Solution	<ul style="list-style-type: none"> • It can be integrated with smart watch and apps for further advancements which is very helpful for earlier prediction. And further, we can provide live doctor consultancy, keep up the old data records for increasing accurate prediction and advices to prevent heart disease. Notifies alerts to nearby hospital when person is at risk.