

Project Design Phase – I

Proposed Solution

Date	19 September 2022
Team ID	PNT2022TMID21213
Project Name	Visualizing and Predicting Heart Diseases with an Interactive Dashboard
Maximum Marks	4 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Heart disease refers to several types of abnormalities in heart conditions. The leading cause of death is heart disease. It is infeasible for a common man to frequently undergo tests for ECG and so on. Hence, there needs a replacement for this, which must be handy and reliable.
2.	Idea / Solution description	The idea behind the proposed solution is to propose an interactive dashboard for visualizing and predicting heart diseases in which user can view his/her medical report analysis and the predicted final result. The dashboard will be generated using IBM Cognos. First the data set will be explored and preprocessed. The K-nearest neighbors, support vector machine and Decision tree classifier will be used for prediction. The best scored out of the above will be taken for final prediction and display.
3.	Novelty / Uniqueness	The novelty behind the proposed system is to provide suggestions to the user in non medical way and to help them understand their body level. This will help them take required precautions and tune to their body requirement.
4.	Social Impact / Customer Satisfaction	This helps the user, doctor or concerned personal understand the patient and to take better decisions according to situation. It is useful in predicting the disease in an earlier stage and makes the user alert about his current condition periodically.

5.	Business Model (Revenue Model)	This interactive dashboard for heart disease prediction can be deployed in Health care centers and Hospitals, so that it makes the analysis in a fast manner.
6.	Scalability of the Solution	The proposed solution will work efficiently in both smaller and larger datasets in a similar manner. In future, this can be scaled to other diseases too.