

Project Design Phase-I
Proposed Solution Template

Date	23 September 2022
Team ID	PNT2022TMID27115
Project Name	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)	Visualizing and Predicting Heart Diseases with an Interactive Dash Board
2.	Idea / Solution description	Digital health- Leveraging digital health applications for monitoring of objective parameters such as weight, voice and patient-reported symptoms may improve clinical outcomes in heart disease patients by allowing early actions to optimize treatment.
3.	Novelty / Uniqueness	The novelty of this problem is to feature subset selection using multi-objective genetic algorithm based on heart disease predictor. This feature is used to predict the level of angiographic coronary heart disease using neural networks. The accuracy of the designed Neruo-Genetic model is validated with high testing accuracy of 89.58%.
4.	Social Impact / Customer Satisfaction	Patients with heart failure experience various physical and emotional symptoms such as dyspnea, fatigue, edema, sleeping difficulties, depression, and chest pain. These symptoms limit patients' daily physical and social activities and result in poor QOL. Poor QOL is related to high hospitalization and mortality rates.
5.	Business Model (Revenue Model)	Diagnosing patients correctly on timely basis is the most challenging task for the medical fraternity. A wrong diagnosis by the hospital leads to earn a bad name and loosing reputation. At the same time treatment of the said disease is quite high and not affordable by most of the patients particularly in India. Almost all the hospitals use some hospital management system to manage healthcare in patients. So, in this direction lots of efforts are required to make intelligent decisions. The diagnosis of this disease using different features or symptoms is a complex activity.
6.	Scalability of the Solution	Surveys conducted on people for predicting from heart disease- Early heart disease often doesn't have symptoms or the symptoms maybe barely noticeable that why regular checkups with your doctors are important the World Health Survey(WHS)were launched by the World Health Organization(WHO)to strengthen natural capacity to monitor critical health outcomes and health system.