

Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID28916
Project Name	Project – 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)	The leading cause of death in the developed world is heart disease. Therefore, there needs to be work done to help prevent the risks of having a heart attack or stroke.
2.	Idea / Solution description	An interactive dashboard which visualizes and predicts using Machine Learning algorithms.
3.	Novelty / Uniqueness	We are employing the Naive Bayes algorithm in this system to develop an efficient heart attack prediction system. The system can receive input from a CSV file or manually. After receiving input, the Nave Bayes algorithm is used on that input. After gaining access to the data set, the process is carried out, and a useful heart attack level is generated. The suggested approach will include additional heart attack risk factors such as weight, age, and priority levels after speaking with doctors and other medical professionals.
4.	Social Impact / Customer Satisfaction	It helps in the time of emergencies. If any heart problem is predicted in advance, we can provide valuable insights to clinicians, allowing them to tailor their diagnosis and treatment to each individual patient.
5.	Business Model (Revenue Model)	For prediction, the algorithm makes use of 15 medical variables, including age, sex, blood pressure, cholesterol, and obesity. The likelihood that a patient may develop heart disease is predicted by the EHDPS. It makes it possible to build linkages between important knowledge, including patterns between medical parameters associated to heart disease.
6.	Scalability of the Solution	Our key contribution in this work is to predict heart disease diagnosis using a modest number of parameters. Our prediction system employs random forest on Apache Spark, allowing health care analysts to deploy this solution on a constantly changing, scalable big data

		landscape for informed decision making. We demonstrate that this method achieves up to 98% accuracy. We also compare our classifier to the Nave-Bayes classifier.
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