V.S.B ENGINEERING COLLEGE
Electronics and Communication Department
Project Design Phase-I
IBM NALAIYA THIRAN

Domain : Data analytics
Topic : Visualizing and predicting heart disease with interactive dashboard
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S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Heart disease can be managed effectively with a combination of lifestyle changes,medicine and in some cases,surgery. With the right treatment,the symptoms of heart disease can be reduced and the heart improved. The predicted results can be used to prevent and thus reduce cost for surgical treatment and other expenses. Data Analytics will be very useful for this to predict the heart by visualization.
2.	Idea / Solution description	We have an idea to predict heart disease by means of collecting the data according to the human's age. The data collected must include the parameters such as blood pressure,sugar,cholesterol and habitual. Giving the validate correct medicines and involving diet for those individuals makes them get rid of heart disease. It can be predicted easily.

3.	Novelty / Uniqueness	Reduced **heart** rate variability has also been observed in depressed patients when … with **heart disease** has been shown in numerous studies to be related to decreased **heart** rate.
4.	Social Impact / Customer Satisfaction	Involve the **heart** or blood vessels. **Cardiovascular disease** comprises coronary **artery diseases** (CAD) such as angina and myocardial infarction (**heart attack**), stroke, hypertensive heart disease.
5.	Business Model (Revenue Model)	…B**usiness** aspirations dovetail in that the **cardiac problems** … She is convinced that a **predictive** mathematical **model** can be … Furthermore, the **revenue model** based on fixed installation …
6.	Scalability of the Solution	A scalable framework that uses healthcare data to predict heart disease based on certain attributes. Our main contribution in this work is to predict the diagnosis of heart disease with a small number of attributes. Our prediction solution uses random forest on Apache Spark, which gives massive opportunity for health care analysts to deploy this solution on ever changing, scalable big data landscape for insightful decision making. Using this approach, we show that up to 98% accuracy is achieved. We also present a comparison against Naïve-Bayes classifier, where we show the random forest approach outperforms the former by a significant margin.