Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	15 October 2022
Team ID	PNT2022TMID53144
Project Name	Project - Visualizing and Predicting Heart Diseases with an Interactive Dash Board
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Google Registration through Mail Registration through Form
FR-2	User Confirmation	Confirmation via Email Confirmation via SMS
FR 3	Patient details	Collection of patient details through HTML form.
FR-4	Analysis of patient data	Analyzing and Visualizing the relationship between various features of patient data.
FR-5	Feature Selection	Selecting the most relevant features and getting rid of noise in data.
FR-6	Prediction	Displaying the result of analysis.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The EHDPS predicts the likelihood of patients getting heart disease. It enables significant knowledge like the relationships between medical

		factors related to heart disease and patterns to be established.
NFR-2	**Security**	When it comes to health-related issues, we should offer greater security services. While developing the software or application, there shouldn't be any errors, lagging, or bases of data for patient profiles.
NFR-3	**Reliability**	Support vector machine (SVM), Gaussian Naive Bayes, logistic regression, and random forest algorithm have been employed for developing heart disease risk prediction model and obtained the accuracy as 80.32%, 78.68%, 80.32% and 88.5%, respectively
NFR-4	**Performance**	The relaying performance needs to be quick. . To enable improved accessibility and make a significant advancement in the provision of high-quality, reasonably priced healthcare, this prediction system should be made available on the cloud.
NFR-5	**Availability**	By setting up An Application Performance Monitoring (APM) system that helps to monitor the availability of application. Consistent performance monitoring and optimization help you to tackle issues as quickly as they show up. Our app is designed in such a way that to emphasize availability by spreading data across clusters so that if one fails the entirety of the data is not lost..
NFR - 6	**Scalability**	A scalable app can easily accommodate double, triple, or even ten times its current amount of users by withstanding no crashes, no downtime, Fast loading speeds, Top -notch security. We’re gonna make our app more scalable by using right Tech stack & Infrastructure scaling to process millions of data with bug free , multiple database servers that accommodate millions of user to secure our app’s fail -safe performance, using caching and stateless approach to reduce the load, Content Delivery Networks (CDN) to minimal response time.