Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID04852
Project Name	Project - Classification of Arrhythmia by Using Deep Learning with 2-D ECG Spectral Image Representation
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)	To build an effective electrocardiogram arrhythmia classifying web application using neural network. The application helps to know the type of arrhythmia using their heartbeat for every moment.
2.	Idea / Solution description	Creating a classic looking & responsive web application (supported by all the OS) where the user selects the image which is to be classified. Classifying the arrhythmia into seven categories using neural network.
3.	Novelty / Uniqueness	Convolutional neural network is used to classifying the arrhythmia using ECG spectral image.
4.	Social Impact / Customer Satisfaction	Customers who are doing heavy exercise and more than 60 years need to know about their heartbeat status or type of arrhythmia for every moment. ECG diagnosis in the hospital is too expensive. This web application satisfying their requirements without spending any cost.
5.	Business Model (Revenue Model)	This can be converted as a business model because it is easy to integrate with the devices like smart watch. We are going to host the application in the web, so most of the common people and the hospital will use this application. Usage of this web application will be high.
6.	Scalability of the Solution	This web application will be scalable. Once the image is classified under the category of arrhythmia then the suitable diagnosis and the health tips (integrated with their daily life style) will be displayed. And this application will be integrated easily with any handhold devices.