Project Design Phase-I

Proposed Solution Template

Date	29 September 2022
Team ID	PNT2022TMID09848
Project Name	Classification of Arrhythmia by
	Using Deep Learning with 2-D ECG
	Spectral Image Representation
Maximum Marks	

Proposed Solution Template:

Project team shall fill the following information in proposed solution template

S.No.	Parameter	Description
1.	Problem Statement (Problem to	The User needs a way to identify
	be solved)	whether he/she is affected by
		Arrhythmia so that he/she need or
		need not consult a doctor
2.	Idea / Solution description	Developing an AI model/
		application for Classification of
		Arrhythmia
3.	Novelty / Uniqueness	Convolutional neural network is
		used to classifying the arrhythmia
		using ECG spectral image.
4.	Social Impact / Customer	It's very hard to interactively
	Satisfaction	predict the abnormal heartrates.
		Hence an automated system
		which can be able to identify
		discrete abnormal heartbeats from
		an abundant ECG data will create
		a moral impact among the society.

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.