Project Design Phase-I
Proposed Solution Template

Date	30 September 2022
Team ID	PNT2022TMID01033
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)	Patient suffering from **Arrhythmia** has to be treated as early as possible and each arrhythmia has its own treatment so it might be risky to the patient**, if detected late or the possibility of medical errors by doctors as ECG are reviewed manually**
2.	Idea / Solution description	• Late detection and medical errors has to be avoided • It could be done so by creating an app for classifying the arrhythmia accurately and as early as possible
3.	Novelty / Uniqueness	The Solution provided is quite unique as 2-D ECG is fed to the model and the image given as input is classified by using CNN to classify the Arrhythmia
4.	Social Impact / Customer Satisfaction	• It doesn't have any impact on the environment • The customer will also gets satisfied as the above mentioned problem is solved and the same app can be used any number of times for multiple person to detect and classify Arrhythmia
5.	Business Model (Revenue Model)	• Since one app can be used to classify the Arrhythmia any number of times for various person so it is a one time investment by the customer and is quite affordable as well • At the same time it also brings revenue to the Organisation
6.	Scalability of the Solution	It is also possible to scale the app[model] further by increasing the images fed to the app[model] thereby making some small changes so that it could be combined with other apps to build integrated app which serves well for customer needs