

Project Design Phase-I
Proposed Solution Template

Date	25 th September 2022
Team ID	PNT2022TMID03498
Project Name	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)	We know that Arrhythmia is a heart related disorder and can either be curable or incurable. These are classified into 7 types. Classifying this disorder for the ECG will be the best challenge because only few dissimilar variations are there between every type of this disorder.
2.	Idea / Solution description	Our Idea is to create a model using deep learning that can read the ECG and can classify the Arrhythmia even by those similarities.
3.	Novelty / Uniqueness	The classification is done by using deep learning with 2-D ECG Spectral Image representation. This helps to diagnose the difference between each and every Arrhythmia which can be differentiated by ECG.
4.	Social Impact / Customer Satisfaction	This may help doctors diagnose easily and the patients don't need to panic and worry about their health.
5.	Business Model (Revenue Model)	AI is one of today's most heralded technologies and this model is for health care; this application is most likely to be used by money.
6.	Scalability of the Solution	Scalability of the model depends on the training and accuracy of the model which helps the model to train itself. More training of the model leads to a good prediction of the model.