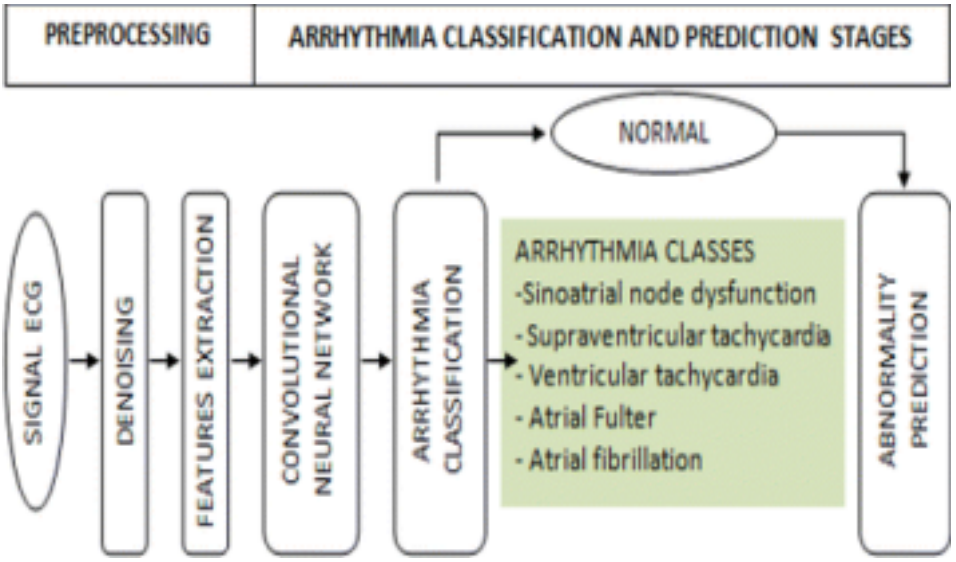
Project Design Phase-I
Proposed Solution

Date	07 November 2022
Team ID	PNT2022TMID52395
Project Name	Project - Classification Of Arrhythmia By Using Deep Learning With 2-D ECG Spectral Image Representation
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Monitoring the electrical activity of the human heart is done using electrocardiography (ECG). Clinical specialists frequently utilise an ECG signal in a collected time arrangement to assess any rhythmic conditions of a subject. By showing the issue with encoder-decoder techniques and employing misfortune appropriation to forecast normal or abnormal information, the research was done to automate the assignment.
2.	Idea / Solution description	Here we present a deep learning system that identifies abnormal heartbeat using ECG spectral images comparably or better than presented in the previous studies, although we use 2D spectral images in training.
3.	Novelty / Uniqueness	Here we presented novel results that identifies the heart beat whether it beats too slowly , too quickly or irregularly by comparing to other studies made for arrhythmia classification including state of the art results for more accurately classifies according to the 2d ecg spectral images.
4.	Social Impact / Customer Satisfaction	This deep learning model can be used to identify people with irregular heartbeat and Diagnose the clinical grade of arrhythmia in them

5.	Business Model (Revenue Model)	
6.	Scalability of the Solution	This deep learning system could increase the cost effectiveness of screening and diagnosis of the ECG 2D spectral image using the pattern found in P,Q,R,S,T waves , attaining higher than recommended performance and that the system could be applied in clinical examinations requiring finer grading.