

Project Design Phase-I
Proposed Solution Template

Date	24 october2022
Team ID	PNT2022TMID14992
Project Name	Classification Of Arrhythmia By Using Deep Learning With 2-D ECG Spectral Image Representation
Maximum Marks	2 Marks

Proposed Solution Template:

Classification Of Arrhythmia By Using Deep Learning With 2-D ECG Spectral Image Representation

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none">• ECG is often used alongside other tests help the diagnose and monitor conditions affecting the heart• Its used to investigate symptoms of a possible heart problems such as chest pain, palpitations and shortness of breath• arrhythmia is an abnormal of the heart's rhythm• So they needs to dependent on other person which makes them feel more reliable• The web application can find the heart issues and show the result visually
2.	Idea / Solution description	<ul style="list-style-type: none">• It should provide quick result of their problems• The electrocardiogram (ECG) is one of the most extensively employed signals used in the diagnosis and prediction of cardiovascular diseases (CVDs). The ECG signals can capture the heart's rhythmic irregularities, commonly known as arrhythmias• The 2-D CNN model consisting of four convolutional layers and four pooling layers is designed for extracting robust features from the input spectrograms• machine learning and deep learning Commonly, if deep learning is adopted in physiological-based emotion recognition, there are no feature extraction and feature selection steps.• If the deep learning architecture has a convolutional layer, it might somehow be considered as a dimensionality reduction stage.

3.	Novelty / Uniqueness	<ul style="list-style-type: none"> • This enables the elderly to keep track of their meditation. • Back up option is available,if the data or record is deleted accidentally. • The user receives the notification command in the appropriate time. • It's a time saving application.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> • It will also serve to assist the elderly in a more effective manner and will be used to improve their daily life in terms of arrthmia consumption. • Our system promotes safe and independent living which makes them more self-reliable and healthier cared-for individuals. • It is time saveing application • From anywhere in the world, family members may check on a loved one's wellbeing. • This web application efficient to use docter and patient
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> • Our proposed web application will be a subscriber service which is very affordable. • Proper updates in the application according to trends and customer convenience which makes high customer retention. • Proper upkeep of privacy policies that enhances customer's trust.
6.	Scalability of the Solution	<ul style="list-style-type: none"> • The proposed application is more convenient to use in both android and ios based application. • The user can be upload the current medical report. • This solution is provide with cloud storage with needed space.