Project Design Phase -I

Proposed Solution

| Date | 10 November 2022 | |
|---------------|---------------------------------------|--|
| Team ID | PNT2022TMID44136 | |
| Project Name | 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) | 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. A careful study of ECG signals is crucial for precise diagnoses of patients' acute and chronic heart conditions. |
| 2. | Idea/Solution description | Advanced AI methods, such as deep-learning convolutional neural networks, have enabled rapid, human-like interpretation of the ECG, while signals and patterns largely unrecognizable to human interpreters can be detected by multilayer AI networks with precision, making the ECG a powerful, non-invasive biomarker. |
| 3. | Novelty/Uniqueness | The AI based system is fed with the instructions to make the peoples happy based on the hard coded biases. In this way, this help to spot the favourite trend among people to improve the technology |

| 4. | Social Impact/Customer | It useful to peoples. product |
|----|-----------------------------------|---|
| | Satisfaction | can be useful for long days. |
| 5. | Business Model (Revenue Model) | 1) Google ads- ads can be displayed in the application 2) Subscription – Subscription can be provided to access |
| | | specific features. |
| 6. | Scalability Of the Solution | A scalable AI solution has to work with data in real-time as it is being generated and sometimes to the tune of millions of records on a daily basis. This requires the transformation of the operating model of a business, a series of top-down and bottom-up actions, adopting a new culture, and commitment of a big budget |