**Project Design Phase-I**

**Proposed Solution**

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| Date | 14 October 2022 |
| Team ID | PNT2022TMID36166 |
| Project Name | Classification Of Arrhythmia By Using Deep Learning With 2-D ECG Spectral Image Representation |
| Maximum Marks | 2 Marks |

**Proposed Solution:**

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | * A Heart arrhythmia is an irregular heartbeat. Heart rhythm problems occur when electrical signals that coordinate the hearts beats don’t work properly. * The faulty signalling causes the heart to beat too fast, too slow or irregularly. |
|  | Idea / Solution description | * The image is fed into the model that is trained and the cited class will be displayed on the webpage. We can also able to see the results. |
|  | Novelty / Uniqueness | * The other six being different types of arrhythmia using deep two-dimensional CNN with grayscale ECG images. |
|  | Social Impact / Customer Satisfaction | * We are creating a web application where the user selects the image which is to be classified. * The image is fed into the model that is trained and the cited class will be displayed on the webpage. |
|  | Business Model (Revenue Model) | * We build an effective electrocardiogram (ECG) arrhythmia classification method using a convolutional neural network (CNN). * In which we classify ECG into seven categories, one being normal and the other six being different types of arrhythmia. |
|  | Scalability of the Solution | * Apply the biosensor to the prepared skin to start monitoring. ECG data is analysed by using CNN platform using AI. * In upcoming years any one can develop and introduce new concept with use this same content. |