

**PROJECT DESIGN PHASE-II**  
**SOLUTION REQUIREMENTS (FUNCTIONAL & NON-FUNCTIONAL)**

|               |   |
|---------------|---|
| Date          | 03-nov-2022   |
| Team ID       | PNT2022TMID44835  |
| Project Name  | Classification of Arrhythmia using Deep Learning with 2-D ECG Spectral Image Representation |
| Maximum Marks | 4 Marks   |

**FUNCTIONAL REQUIREMENTS:**

Following are the functional requirements of the proposed solution

| FR No. | Functional Requirement (Epic) | Sub Requirement (Story / Sub-Task)                     |
|--------|-------------------------------|--|
| FR-1   | User Registration             | Registration through Form , Registration through Gmail |
| FR-2   | User Confirmation             | Confirmation via Email , Confirmation via OTP          |
| FR-3   | Get User Input                | Upload image as jpeg , Upload image as png             |
| FR-4   | Save Image                    | Images are saved in the uploads folder                 |
| FR-5   | Chat with Doctor              | Consult with Doctor                                    |
| FR-6   | Report Generation             | Get complete Report                                    |

**NON-FUNCTIONAL REQUIREMENTS:**

Following are the non-functional requirements of the proposed solution.

| FRNo. | Non-Functional Requirement | Description  |
|-------|----------------------------|--|
| NFR-1 | <b>Usability</b>           | Classification of Arrhythmia with the help of AI.      |
| NFR-2 | <b>Security</b>            | User's data cannot be accessed by unauthorized people. |
| NFR-3 | <b>Reliability</b>         | The system performs without failure                    |
| NFR-4 | <b>Performance</b>         | High accuracy  |
| NFR-5 | <b>Availability</b>        | Anyone who is authorized                               |
| NFR-6 | <b>Scalability</b>         | Does not affect the performance even though            |