

# Project Design Phase – II

## Functional Requirements (solution requirements)

Date	16 October 2022
Team ID	PNT2022TMID28062
Project Name	Classification of Arrhythmia by 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 Registration through Gmail Registration through Linked IN
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User interface	Check your profile Choose your file Sign Out your account and change your password
FR-4	Upload ECG	User has to upload ECG image onto the webpage. User ECG images in our web application Collection of datasets Database read ECG images
FR-5	Challenges and notifications	Giving health challenges and healthy tips Remembering to take medicines Remembering to take regular check-up and doctor consultations.

### Non-Functional Requirements:

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

FR.NO	Non-Functional Requirements	Description
NFR-1	<b>Usability</b>	The application should have user friendly Graphics User Interface.
NFR-2	<b>Security</b>	No third-party web and UI is used for prediction of data. Details about user interaction with the web application is protected.
NFR-3	<b>Reliability</b>	Higher accuracy rate. Defect free.
NFR-4	<b>Performance</b>	The application should detect Arrhythmia as fast as possible with more accuracy.
NFR-5	<b>Availability</b>	The software should be available for multiple user access simultaneously.
NFR-6	<b>Scalability</b>	The application should be scalable to upload multiple images at a time for detection