

Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	17 October 2022
Team ID	PNT2022TMID38553
Project Name	Project: 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 Gmail
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
-+	Image upload	The user should be able to upload the image on the web application
FR-4	Results	The user should be able to view the results i.e,the type of arrhythmia when they upload the image of ECG.
FR-5	Authentication	The web application should authenticate the users once they signup.
FR-6	Data preprocessing	The data should be preprocessed.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The web app should be easy to learn, navigate, use and it should be user-friendly and error tolerant.
NFR-2	Security	The web app should be secure enough to protect the images uploaded by the users and should secure the personal information provided by the users when they signup.
NFR-3	Reliability	The web app should be consistent in the results over time between users and it should provide the accurate results to every user.

NFR-4	Performance	The web page should load within 3 seconds and should be able to display the results within 2/3 seconds after the images are uploaded by the users and also it should many number of users.
NFR-5	Availability	The web app should be able to display results 24 * 7. It should be available to anyone anywhere across the world.
NFR-6	Scalability	The web app should be able to handle when there is an increase in the number of users.