

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

Date	15 October 2022
Team ID	PNT2022TMID36404
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 through Gmail
FR-2	User Registration Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Login	Login through Form Login through Gmail
FR-4	User Login Confirmation	Redirect to Home page
FR-5	Upload ECG Graph Pictures	Capture the ECG and upload Directly upload from Files
FR-6	Prediction by Model	Result is based on the classification of the Arrhythmia disease read from the prediction

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	The UI is designed in such a way that the user can easily use it and easy to understand
NFR-2	<b>Security</b>	Since the model is hosted online, security is little less but the security is high when the web app is made as a mobile application.
NFR-3	<b>Reliability</b>	The model is reliable in such a way that it can identify the classification between the arrhythmias
NFR-4	<b>Performance</b>	Since it is used online, the performance is based on the internet speed connected to the device
NFR-5	<b>Availability</b>	Since it is hosted online, it is available on all devices like PC, Laptop, Mobile phones etc.
NFR-6	<b>Scalability</b>	The scalability of the model is excepted likely to be high as the performance of the model is good.