

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

Date	03 October 2022
Team ID	PNT2022TMID16055
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 App.
FR-2	Upload Image	Uploading the image through a web application
FR-3	Analyzing the User Data	Analyzing the image given by the user through the Model
FR-4	Display the Data	Using the model analysis, Results are showcased in the display

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	It is a very user-friendly application as we use AI techniques to easily understand ECG signals.
NFR-2	<b>Security</b>	We can secure the patient's data with appropriate caution and take smart decisions. Restrict Access to Data and Applications.
NFR-3	<b>Reliability</b>	It provides consistency in the quality and safety of healthcare systems or processes performed over a required period It is trustable since it has a lower risk of errors and process failures that can cause patients harm.
NFR-4	<b>Performance</b>	It is a high-Performance Application because doctors can easily find the image data.
NFR-5	<b>Availability</b>	ECG signals are crucial for precise diagnoses of patients' acute and chronic heart conditions.
NFR-6	<b>Scalability</b>	Scalability provides implanting a digital way to accommodate in any size facility with any number of

		users. Multiple facilities can be hooked up to a central administrative control center, all able to operate together at the same time and able to share information at the same time.
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