

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

Date	03 October 2022
Team ID	PNT2022TMID15268
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 website through email for verification.
FR-2	User Confirmation	Verification of the OTP on the website.
FR-3	User data	Uploading the image of ECG used for arrhythmia diagnosis.
FR-4	User diagnosis results (Single and multiple input)	Results of the arrhythmia prediction and classification displayed in the website.
FR-5	User diagnosis results (multiple input)	Results of the arrhythmia prediction and classification sent to registered email.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Usability or ease of use refers to the many factors that constitute what users often describe as user-friendliness.
NFR-2	Security	It assures all data inside the system or its part will be protected against malware attacks or unauthorized access.
NFR-3	Reliability	It is the probability and percentage of the software performing without failure for a specific number of users or amount of time.
NFR-4	Performance	It defines how fast a software system or a particular piece of it responds to certain users actions under a certain workload.
NFR-5	Availability	It describes how likely the system is accessible to a user at a given point in time.
NFR-6	Scalability	It is the ability to handle an increase in workload without performance degradation, or its ability to quickly enlarge.