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

Date	14 October 2022
Team ID	PNT2022TMID48069
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 Registration through LinkedIN
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR- 3	User interface	Check your profile Choose your file Sign Out your account account and change your password
FR- 4	Data processing	Evaluating the model using test data Training DL algorithm for a accuracy result Trained CNN model using Tensorflow,Kearas
FR-5	Predict ECG image	User ECG images in our web application Collection of datasets Database read ECG images

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Wireless ECG body sensor Savvy is a feasible solution for reliable and accurate long-term heart rhythm monitoring**.** However, there were no studies dealing with usability of this sensor in field testing.
NFR-2	Security	The work presented in this paper is applicable for encrypting and decrypting personalized Electrocardiograph ECG signals for secure transmission.
NFR-3	Reliability	The extent to the consistently performs the specified functions without failure
NFR-4	Performance	It essentially specifies how the system should behave and that it constrains the ECG wavelength of accurate disease information gathering.
NFR-5	Availability	Availability describes how likely the system is accessible to a user at a given point in time and the periodically for a solutions.
NFR-6	Scalability	The ability of the user problem in arrhythmia disease to handle an increase in workload without performance degradation, or its ability to quickly enlarge.