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

Date	14 October 2022
Team ID	PNT2022TMID26020
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 throughForm Registration through Gmail Registration through LinkedIN
FR-2	User Confirmation	Confirmation via Confirmation via OTP
FR- 3	User interface	Check your profile Choose you file Sign out your account account and change your password
FR- 4	Data processing	DL algorithm training and model evaluation for an accuracy result Tensorflow-trained CNN model, Kearas
FR-5	Predict ECG image	User ECG images in our web application Collection 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	Savvy, a wireless ECG body sensor, is a practical option for precise and long-term heart rhythm monitoring. The applicability of this sensor in field testing, however, has not been the subject of any investigations.
NFR-2	Security	Personalized Electrocardiograph ECG signals can be encrypted and decrypted using the work given in this study for secure communication.
NFR-3	Reliability	the degree to which consistently and without error fulfils the stated functions
NFR-4	Performance	It simply lays out the expected behaviour of the device and limits the ECG wavelength for precise disease information collecting.
NFR-5	Availability	The term "availability" refers to the likelihood that a system will be made available to a user at a specific time and on a regular basis for solutions..
NFR-6	Scalability	The user problem in arrhythmia disease's capacity to withstand an increase in workload without experiencing performance deterioration or its capacity to grow rapidly.