Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	03 October 2022
Team ID	PNT2022TMID15718
Project Name	Classification of Arrhythmia by using Deep Learning with 2-D

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	One of the very significant problems in pattern recognition applications is the recognition of Arrhythmia classification.Applications for digit recognition includefilling out forms, processing bank checks,and sorting mail.
NFR-2	**Security**	1) The system generates a thorough description of the instantiation parameters, which might

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Sub Requirement (Story / Sub-Task)
FR-1	Image Data: Arrhythmia classification refers to a computer's capacity to identify heart disease from a variety of sources, such as photographs, documents, touch screens, etc., and Arrhythmia classification them into ten established classifications. In the realm of deep learning, this has been the subject of countless studies.
FR-2	Website: Web hosting makes the code, graphics, and other items that make up a website accessible online. A server hosts every website you've ever visited. The type of hosting determines how much space is allotted to a website on a server. Shared, dedicated, VPS, and reseller hosting are the four basic varieties.
FR-3	Arrhythmia classification Model: To train a convolutional network to predict the digit from an image, use the ECG database of handwritten digits. get the training and validation data first.

FR-4	Cloud: The cloud offers a range of IT services, including virtual storage, networking, servers, databases, and applications. In plain English, cloud computing is described as a virtual platform that enables unlimited storage and access to your data over the internet.
FR-5	Modified National Institute of Standards and Technology dataset: The abbreviation ECG stands for the ECG dataset. It is a collection of 60,000 tiny square grayscale photographs, each measuring 28 by 28, comprising Arrhythmia images.

Non-functional Requirements:

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

		reveal information like the writing style, in addition to a categorization of the The generative models are capable of segmentation driven by recognition. 3) The procedure uses a relatively.
NFR-3	**Reliability**	The samples are used by the neural network to automatically deduce rules for reading handwritten digits. Furthermore, the network may learn more about handwriting and hence enhance its accuracy by increasing the quantity of training instances. Numerous techniques and algorithms, such as Deep Learning/CNN, SVM, Gaussian Naive Bayes, KNN, Decision Trees, Random Forests, etc., can be used to recognise ECG classification
NFR-4	**Accuracy**	With typed text in high-quality photos, optical character recognition (OCR) technology offers accuracy rates of greater than 99%. However, variances in spacing, abnormalities in Heart , and the variety of humanheart analysis
NFR-5	**Availability**	