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

Date	14 October 2022
Team ID	PNT2022TMID28601
Project Name	Project- A Novel Method for Handwritten Digit Recognition System
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	Image Data	Handwritten digit recognition refers to a computer's capacity to identify human handwritten digits from a variety of sources , such as photographs, documents, touch screens, etc.
FR-4	Website	Web hosting makes the codes, graphics, and other items that make up a website accessible online. A server hosts every website you've ever visited.
FR-5	Digit Classifier Model	To train a convolutional network to predict the digit from an image, use the MNIST database of handwritten digits.
FR-6	Cloud	The cloud offers a range of IT services, including virtual storage, networking, servers, database and applications. The virtual platform enables unlimited storage and access to your data over the internet.
FR-7	Modified National Institute of Standards and Technology dataset	The abbreviation MNIST stands for the MNIST dataset. It is a collection of 60,000 tiny square grayscale photographs, each measuring 28 by 28, comprising handwritten single digits between 0 to 9.
FR-8	Evaluation	Checking the model whether the prediction is correct.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	One of the very significant problems in pattern recognition applications is the recognition of handwritten characters.
NFR-2	**Security**	1)The generative models are capable of segmentation driven by recognition. 2)The procedure uses a relatively.
NFR-3	**Reliability**	The samples are used by the neutral network to automatically deduce rules for reading handwritten digits. It can be used to recognise handwritten numbers.
NFR-4	**Performance**	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 handwriting, and the variety of human writing styles result in less precise character identification.
NFR-5	**Availability**	Available as software for both common and professional use.
NFR-6	**Scalability**	It also helps many individuals to solve their problem with low time consumption and high accuracy.