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

Date	15 October 2022
Team ID	PNT2022TMID19491
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
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Login	Login page gets displayed and User is Logged in
FR-4	Upload Handwritten Files	Upload files to Recognize the digits
FR-5	Displaying Output	Appropriate digits gets displayed to the user

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Handwritten character recognition is one of the practically important issues in pattern recognition applications. The applications of digit recognition include in postal mail sorting, bank check processing, form data entry, etc
NFR-2	**Security**	The application where this handwritten digit recognition can be used are banking sector where it can be used to maintain the security pin numbers, it can be also used for blind-people by using sound output.
NFR-3	**Reliability**	The probability that the system will perform its intended function adequately for a large period of time and will operate in a secured environment without failure.
NFR-4	**Performance**	The standard implementations of neural networks achieve an accuracy of ~ (98–99) percent in correctly classifying the handwritten digits.

NFR-5	**Availability**	Abstract and Figures. The features for handwritten digit recognition have been introduced. These features are based on shape analysis of the digit image and extract slant or slope information. They are effective in obtaining good recognition accuracies.
NFR-6	**Scalability**	The task of handwritten digit recognition, using a classifier, has great importance and use such as – online handwriting recognition on computer tablets, recognize zip codes on mail for postal mail sorting, processing bank check amounts, numeric entries in forms filled up by hand (for example - tax forms) and so on.