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

Date	16 October 2022
Team ID	PNT2022TMID41032
Project Name	Project – The Novel Method For Handwritten 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	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 get 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**	One of the very significant problems in pattern recognition applications is the recognition of handwritten characters. Applications for digit recognition in clued filling out forms, processing Bank checks ,and sorting mail.
NFR-2	**Security**	The application where this handwritten digit recognition can beused 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**	Work on the Python deep learning project to build a hand written recognition app using MNIST dataset convolutional neural network and a GUI.
NFR-5	**Availability**	The features for handwritten digit recognition have been introduced. These features are based onshape analysis of the digit image and extract slant or slope information. They are effective in obtaining recognition accuracies.
NFR-6	**Scalability**	The task of handwritten digit recognition, using a classifier, as great importance and use such as online handwriting recognition on computer tablets, recognize zip codes on mail forpostal mail sorting, processing bank check amounts, numeric entries in forms filled up by hand (example - tax forms) and so on.