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

Date	03 October 2022
Team ID	PNT2022TMID07449
Project Name	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 Web Application form Registration through Mobile Application form
FR-2	User Confirmation	Confirmation via Message Confirmation via OTP
FR-3	Recognition Process	● The system should process the input given by the user only if it is an image file (JPG, PNG,etc.,). ● System should detect characters present in the image. ● System should retrieve characters present in the image and display them to the user.
FR-4	Display the error message	System shall show the error message to the user when the input given is not in the required format

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**	Provides clear understand about handwritten digits which makes users feel free to do their activities.
NFR-3	**Reliability**	This software will work reliably for low resolution images and not for graphical images
NFR-4	**Performance**	Handwritten characters in the input image will be recognized with an accuracy of about 98% and more.
NFR-5	**Availability**	This system will retrieve the handwritten text regions only if image contains written text in it
NFR-6	**Scalability**	Capability of developing the new algorithms and improve the existing algorithms is determined by the accuracy and speed factor for training and testing the models.