

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

Date	21 November 2022
Team ID	PNT2022TMID45730
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 Form Registration through Gmail Registration through LinkedIn
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	Upload image	Image upload via files Image upload via folders Image upload via drive Image upload via web Image upload via scan/camera
FR-4	Spelling support	Identifies handwriting of different styles and fonts Spelling check
FR-5	Translation	Handwritten digits from the image are extracted. Conversion of handwritten digits into machine readable form
FR-6	Log out	Log out / sign out.

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	The proposed system gives good results for images that contain handwritten text written in different styles, different size and alignment with varying background
NFR-2	<b>Security</b>	Only authorized people can access the system data and modify the database.
NFR-3	<b>Reliability</b>	The Database is frequently updated with handwriting of different styles and size and will rollback when any update fails.
NFR-4	<b>Performance</b>	The proposed system is advantageous as it uses fewer features to train the neural network, which results in faster convergence.
NFR-5	<b>Availability</b>	The system functionality and services are available for use with all operations.
NFR-6	<b>Scalability</b>	The website traffic limit must be scalable enough to support 2 lakhs users at a time