

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

Date	14 October 2022
Team ID	PNT2022TMID03361
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	Usability	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	Security	Only authorized people can access the system data and modify the database.
NFR-3	Reliability	The Database is frequently updated with handwriting of different styles and size and will rollback when any update fails.
NFR-4	Performance	The proposed system is advantageous as it uses fewer features to train the neural network, which results in faster convergence.
NFR-5	Availability	The system functionality and services are available for use with all operations.
NFR-6	Scalability	The website traffic limit must be scalable enough to support 2 lakhs users at a time