

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

Date	27 October 2022
Team ID	PNT2022TMID03792
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
FR-2	User Confirmation	Confirmation via Email. Confirmation via OTP.
FR-3	User Login	Login via Registered Username. Login via Email & Password.
FR-4	User Authentication	Authentication through Captcha.
FR-5	User Input	Upload the input as Scanned image. Upload the input from Database. Get the input as Real time image.
FR-6	System configuration	RAM At least 4GB. Camera with better resolution. System with Graphical User Interface.
FR-7	Business Rules	System provides an error message when the input is not in a required format or unable to detect. Minimum resolution of image should be of 180 DPI. Size of the image should not exceed 1MB.

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Users should be able to readily understand and use the system design. Furthermore, it should be straightforward to use for people of various ability levels.
NFR-2	<b>Security</b>	The system should automatically be able to authenticate all users using their unique username and password.
NFR-3	<b>Reliability</b>	This model is highly trained, accuracy is highly improved.
NFR-4	<b>Performance</b>	Reduces a human supervision and improves Efficiency and accuracy.
NFR-5	<b>Availability</b>	Accessible to all users, including banks, post offices, libraries, etc.
NFR-6	<b>Scalability</b>	Model is expected to be 95% accurate, and there is potential to expand the model to identify text.