

Project Design Phase-II

Solution Requirements (Functional & Non-functional)

Date	11 October 2022
Team ID	PNT2022TMID47831
Project Name	Project – 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 Web Application
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP Confirmation via Password
FR-3	User Login	Login via Registered Username. Login via Email & Password.
FR-4	User Authentication	Authentication through Captcha Banking sector: Authentication through IFSC code & Authentication through finger print Library and postal sector: Authentication through Identification Card .
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 System with Graphical User Interface Camera with better resolution
FR-7	Business Rules	System provides an error message when the input is not in a required format. 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	Usability	Useful for areas that deal with large databases to reduce complexity . User friendly.
NFR-2	Security	Access only to authorized persons. Easy to track users.

NFR-3	Reliability	This model is highly trained, accuracy is highly improved.
NFR-4	Performance	Reduces a human supervision and improves Efficiency.
NFR-5	Availability	Available for every users like Banks, Post Office, Library, etc.
NFR-6	Scalability	Model is predicted to have accuracy of 95% and has opportunity of extending the model to recognize text.

USE CASE DIAGRAM:

The use case view models functionality of the system as perceived by the users. A use case is a coherent unit of functionality expressed as transactions among the users and the system.

