

Project Design Phase-II Solution

Requirements (Functional & Non-functional)

Date	15 October 2022
Team ID	PNT2022TMID09973
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 Gmail/Messengers.
FR-2	User Login	Login through registered Username and Password.
FR-3	Uploading Files	Input the handwritten images into the application.
FR-4	Input Perception	Recognize characters from images , collect data and prepare it for training.
FR-5	Feature extraction	Analyzing the images and deriving characteristics from these images that identify each specific element.
FR-6	Recognizing digits	Display the recognized digits to the user.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The software must be smooth and user friendly so that the users can use it efficiently with less learning to do. To recognize the digits from bank cheque,papers,entry in forms etc.
NFR-2	Security	Provide security by authentication system in which the users must login with their username and password.
NFR-3	Reliability	Application will be more reliable in use than the previous methods.
NFR-4	Performance	Has to recognize messy writings and provide output efficiently. The Application can provide almost precise accuracy.

NFR-5	Availability	Has to be available to the users from anywhere to give the handwritten images as input.
NFR-6	Scalability	It can handle many users at the same time providing faster response and better recognition.