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

Date	5 November 2022
Team ID	PNT2022TMID22252
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	Varies based on product Handwritten digits to digital format.	The user is first asked to draw a number on the canvas, And the generated model is used to compare the data and give the output in digital form.
FR-2	Recognizing the handwritten digit and displaying.	Recognizing the handwritten digit and displaying.
FR-3	Import the dataset file directly into the program with a command that will download the dataset from its website. save dataset file in the same directory as the program	Installing packages and applications.
FR-4	Create a neural network with multiple nodes as input A layer equal to the number of pixels in the rows	Nil
FR-5	Activate the Neural Network	By Packages – tensorflow

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	System design should be easily understood and user friendly to users. Furthermore, OCR plays an important role for digital libraries, allowing the entry of image textual information into computers by digitization, image restoration, and recognition methods.
NFR-2	Security	The computer can automatically Authenticate all users with their unique username and password
NFR-3	Performance	Information latency should be reduced when hundreds of requests are served.
NFR-4	Availability	Limited access to information for each user

NFR-5	Scalability	The system should be able to handle 10000
		usersaccessing the site at the same time