Project Design Phase-II
Solu5on Requirements (Functional & Non-functional)

Date	03 October 2022
Team ID	PNT2022TMID16247
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	System recognition	The system must be able to accurately recognize handwritten text. The system must be able to handle a variety of handwriting styles.
FR-4	Collecting the dataset	The dataset necessary for the development of the model is taken in the form of csv file from the internet.
FR-5	Digit Prediction	Prediction through NLP and Machine learning algorithm
FR-6	System suggestion	Suggesting the user to upload clear images and need to make it compulsory to upload the image by the users.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The usability of a hand written recognition system in artificial intelligence would be determined by how accurately it can recognize handwritten text. The system should be able to correctly identify a wide variety of handwriting, including different styles and levels of legibility. It should be able to work with a variety of input devices, such as a mouse, trackpad, or touchscreen. The system

		should be easy to use and understand, with clear instructions and feedback. It should be able to handle errors gracefully and provide helpful suggestions for correcting them.
NFR-2	**Security**	Data security and privacy: Any hand written recognition system will require access to a dataset of handwritten samples in order to learn and improve its recognition accuracy. This dataset will need to be secured to protect the privacy of the individuals whose handwriting is included.
NFR-3	**Reliability**	The reliability of a hand written recognition system in artificial intelligence is dependent on a number of factors, including the quality of the training data, the algorithm used, and the hardware on which the system is deployed. The reliability of the system will also degrade over time as the handwriting of the user changes.
NFR-4	**Performance**	There is no definitive answer to this question as it depends on the specific application and the desired outcome. However, some factors that could affect performance include the type of data used for training, the complexity of the handwritten recognition task, and the efficiency of the algorithms used.
NFR-5	**Availability**	Non-functional requirements for hand written recognition in artificial intelligence are typically things like accuracy, speed, and robustness.
NFR-6	**Scalability**	Use a more powerful machine learning algorithm. Use a more efficient data structure . Use a more efficient implementation of the algorithm.