

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

Date	15 October 2022
Team ID	PNT2022TMID21613
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 Input	GUI allows the user to input image by browsing the device storage
FR-2	Model	The MNIST dataset should be trained using CNN to create a trained model
FR-3	Prediction	The trained model has to be tested by using the test data provided by MNIST and the accuracy of the model should be above 90%
FR-4	Evaluation	Ensure that the output produced by the model is correct

**Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Can predict digits with accuracy. The model can be used in bank check processing, data entry etc
NFR-2	<b>Security</b>	It ensures security as the uploaded image is not stored in any database
NFR-3	<b>Reliability</b>	Can process confidential information without data leakage as the data is never stored in any database.
NFR-4	<b>Performance</b>	Improvement in fast prediction. We use CNN algorithm for accurate prediction
NFR-5	<b>Availability</b>	Available for web and mobile browsers
NFR-6	<b>Scalability</b>	Helps many individuals with low time consumption and high accuracy