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

Date	18th October 2022
Team ID	PNT2022TMID27450
Project Name	Project - 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	For user registration, the user must register using his/her credentials such as **email id, username and password** in order to use the website.
FR-2	Image Upload	Inside the user page, the user page consists of an image upload form which will take the image as input. Upon upload it will be passed to the tensorflow model deployed which in hand generates the numericals.
FR-3	Result generation	The final outputs will be generated in the form of popups as well as be notified to the current user through email.
FR-4	Multiple Images Upload	For combined numerical output (ex: 2345), multiple images or a tailored images canvas can be uploaded upon a form.

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	The website which is deployed would define the usability of the application/project. Sleek user interface and responsiveness allows the user to access any device.
NFR-2	**Security**	Usage of database (mysql) and session will allow us to handle and manage security on our website. Google Auth will also be implemented for security purposes
NFR-3	**Reliability**	The handwritten recognition system is all about detecting handwritten digits for computation and or people with disabilities. Its accuracy and performance in multiple datasets would allow us to measure its performance in real time.

NFR-4	**Performance**	The performance of the website can be improved by having the model as a dynamic model which will train by the data feeded by the user along the time.
NFR-5	**Availability**	Since its deployed in cloud (IBM Cloud/Heroku), Its availability is promising
NFR-6	**Scalability**	Initial Deployment through heroku