Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	15 October 2022
Team ID	PNT2022TMID30139
Project Name	A NOVEL METHOD FOR HANDWRITTEN DIGIT RECOGNITION SYSTEM
Maximum Marks	4 Marks

Technical Architecture:

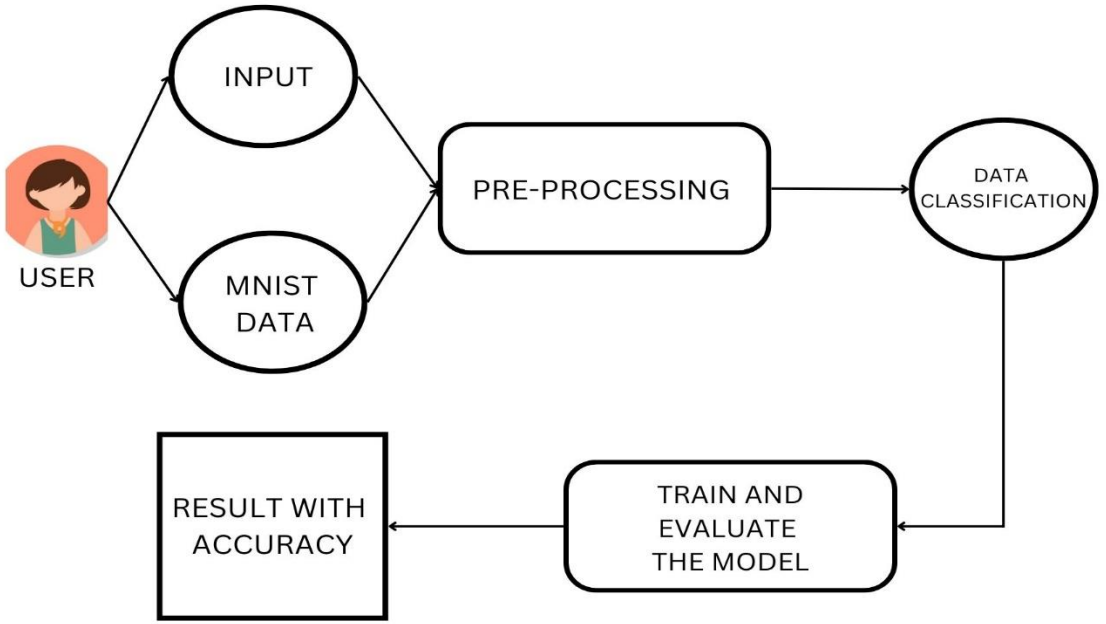

Table-1: Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Allows the user to enter the input and recognise the input using GUI.	HTML, CSS, JavaScript
2.	Dataset	In our model we use MNIST Dataset which consist of 70,000 handwritten data.	Machine Learning
3.	Machine Learning Model	Purpose of Machine Learning Model is to train and test the data and predict the user input with at most accuracy.	Handwritten Recognition Model, Python.
4.	Infrastructure	Application deployment on local system Local server Configuration: Intel core i5/i3 10^{th} Generation.	HTML, CSS

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	TensorFlow, PyTorch, Scikit-learn etc..,	Python
2.	Security Implementations	After predicting the data, we don't store any data so we can't manipulate it in future.	Encryption
3.	Scalable Architecture	Support for multiple sample prediction using Excel File.	Pandas, NumPy
4.	Availability	Available for all web application users.	Web application
5.	Performance	Our model predicts the user input with high accuracy and with low time consumption.	Technology used