Project Design Phase-I
Solution Architecture

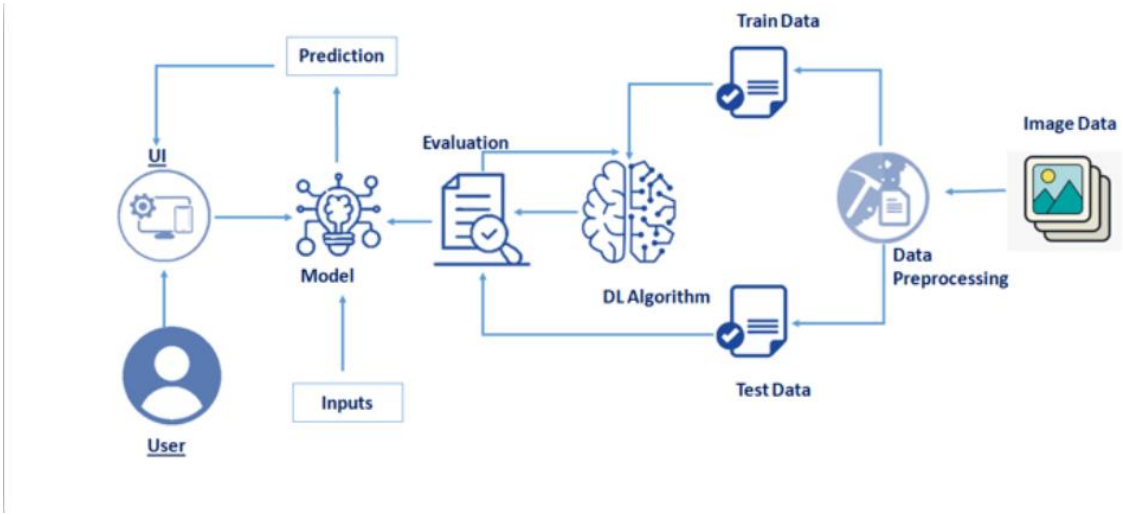
Date	07 October 2022
Team ID	PNT2022TMID23384
Project Name	A NOVEL METHOD FOR HANDWRITTEN DIGIT RECOGNITION SYSTEM
Maximum Marks	4 Marks

Solution Architecture:

Given that everyone in the world has their own writing style, handwriting detection is one of the most intriguing research projects now underway. It is the computer's capacity to automatically recognise and understand handwritten figures or letters. Because of advances in science and technology, everything is being digitalized in order to reduce human effort.

As a result, handwritten digit identification is required in many real-time applications. The MNIST data collection, which contains 70000 handwritten digits, is commonly employed in this recognition process. To train these photos and create a deep learning model, we use artificial neural networks.

Solution Architecture Diagram:



MNIST DATASET

MNIST's handwritten digit recognition dataset includes 60,000 training sessions and 10,000 Testing images of handwritten numbers. Each image is 28 pixels high and 28 pixels wide pixels, so a total of 784 (2828) pixels. Each pixel is associated with a single pixel value. This indicates how bright or dark that pixel is (a higher number means a darker pixel). This pixel value is an integer between 0 and 255.