Project Design Phase-II
Data Flow Diagram & User Stories

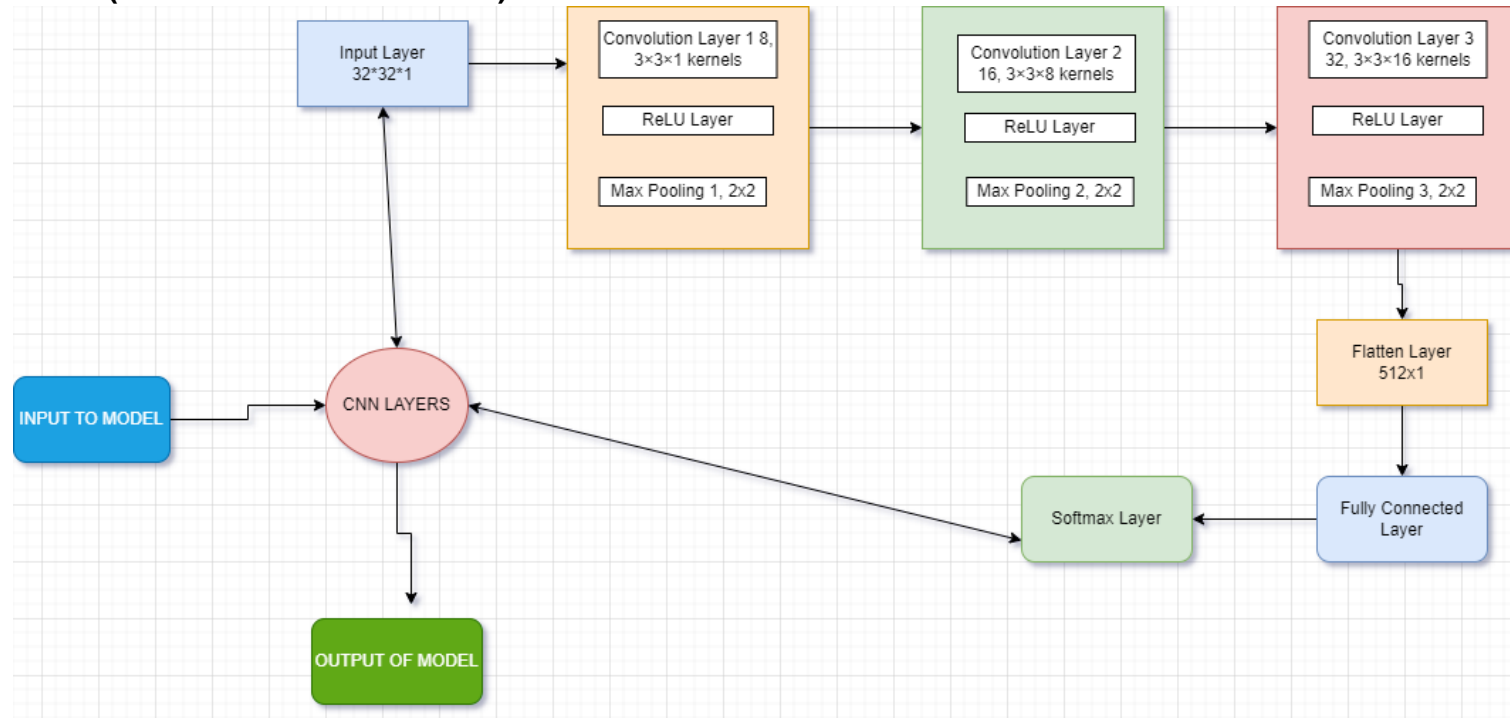| Date	17 October 2022
Team ID	PPNT2022TMID06491
Project Name	Project - A Novel Method for Handwritten Digit Recognition System
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

Simplified: DFD-0(DATA FLOW DIAGRAM-0)

DFD-1(DATA FLOW DIAGRAM 1)

Input Layer
32*32*1

Convolution Layer 1 8,
3×3×1 kernels

ReLU Layer

Max Pooling 1, 2x2

Convolution Layer 2
16, 3×3×8 kernels

ReLU Layer

Max Pooling 2, 2x2

Convolution Layer 3
32, 3×3×16 kernels

ReLU Layer

Max Pooling 3, 2x2

Flatten Layer
512x1

CNN LAYERS

INPUT TO MODEL

Softmax Layer

Fully Connected
Layer

OUTPUT OF MODEL
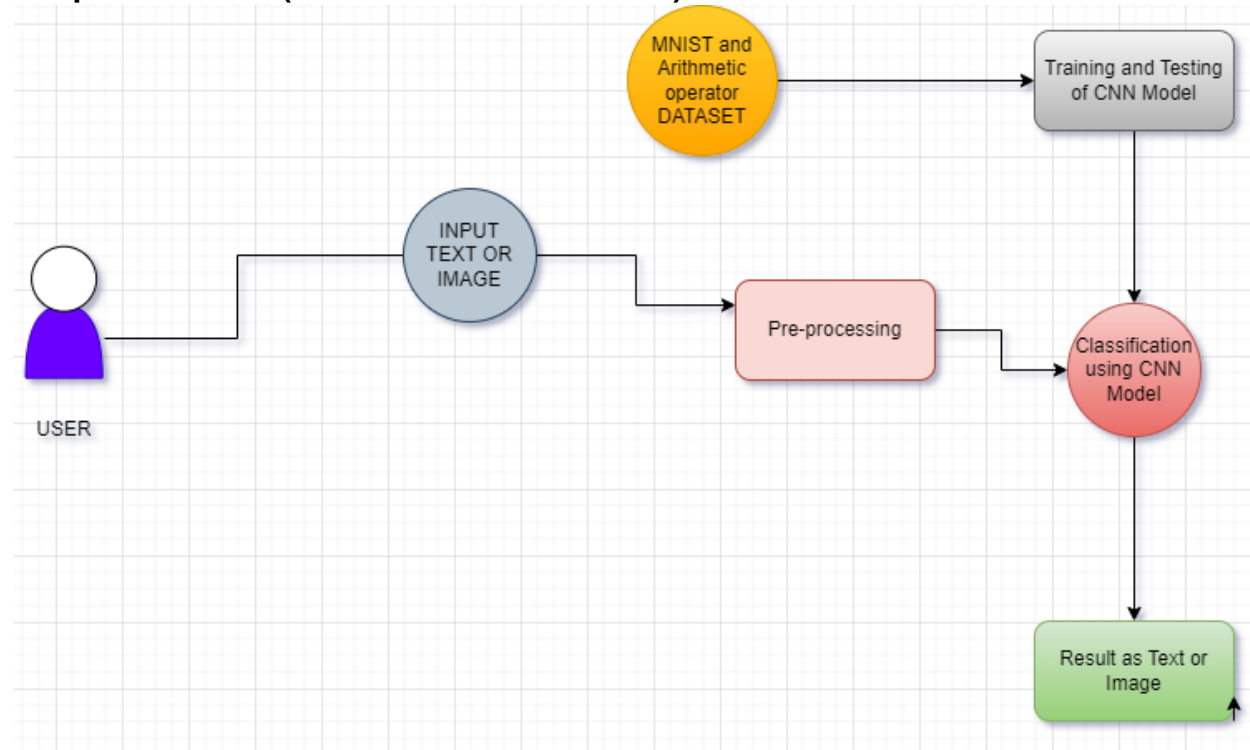
User stories

User Type	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer	USN-1	I can use this Web App to do calculation for basic math like addition, subtraction etc.	I am getting the result	Medium	Sprint-1
	USN-2	I am a postman, I want to recognize the numbers in letters for delivery.	I can get the digital text to store it in computer memory	Medium	Sprint-1
	USN-3	I am bank employee,I want to recognize digits of cheque or challan and enter in computer	I can get the numbers from the cheque	Medium	Sprint-2
	USN-4	As a user, I can able to input the images of digital documents to the application	As a user, I can able to input the images of digital documents to the application	High	Sprint-2
	USN-5	As a user I can able to get the recognised digit as output from the images of digital documents or images	I can access the recognized digits from digital document or images	High	Sprint-3
	USN-6	As a user, I will train and test the input to get the maximum accuracy of output.	I can able to train and test the application until it gets maximum accuracy of the result.	Medium	Sprint-3
Customer (Web user)	USN-7	As a user, I can use the web application virtually anywhere.	I can use the application in any device with a browser	Medium	Sprint-4