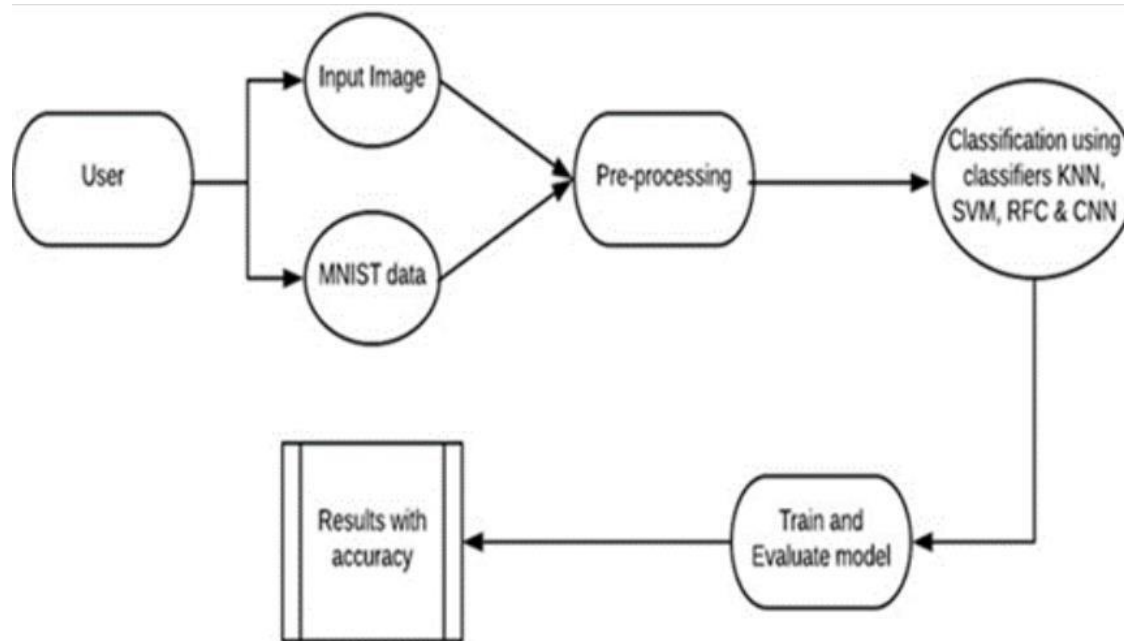


Project Design Phase-II
Data Flow Diagram & User Stories

Team ID	PNT2022TMID24646
Project Name	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.



User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Administrator	Data Collection	USN-1	As an Administrator, I can collect the dataset from various resources with different handwritings.	I can collect the data required	Low	Sprint-1
Administrator	Data Preprocessing	USN-2	As an Administrator, I can load the dataset, handling the missing data, scaling and split data into train and test.	I can load and process the collected data.	Medium	Sprint-1
Administrator	Model Building	USN-3	As an Administrator, I will get an application with ML model which provides high accuracy of recognized handwritten digit.	Created an ml model	High	Sprint-2
Administrator	Add CNN layers	USN-4	Creating the model and adding the input, hidden, and output layers to it.	I can add all the cnn layers	High	Sprint-2
Administrator	Compiling the model	USN-5	With both the training data defined and model defined, it's time to configure the learning process.	The ml model is compiled.	Medium	Sprint-2
Administrator	Train & test the model	USN-6	As an Administrator, let us train our model with our image dataset	I can train and test the model built.	Medium	Sprint-2
Administrator	Save the model	USN-7	As an Administrator, the model is saved & integrated with an android application or web application in order to predict something.	Saved the ml model.	Low	Sprint-2
Normal User	Building UI Application	USN-8	As a user, I will upload the handwritten digit image to the application by clicking a upload button.	I can upload the image from which digit has to be recognized.	High	Sprint-3

Normal User		USN-9	As a user, I can know the details of the fundamental usage of the application.	I can understand the usage of the application	Low	Sprint-3
Normal User		USN-10	As a user, I can see the predicted / recognized digits in the application	Recognize and get the output	Medium	Sprint-3
Administrator	Train the model on IBM	USN-11	As an Administrator, I train the model on IBM and integrate flask/Django with scoring end point.	Register and train the model on IBM	High	Sprint-4
Administrator	Cloud Deployment	USN-12	As an Administrator, I can access the web application and make the use of the product from anywhere	Deployed the application on IBM cloud.	High	Sprint-4