PROJECT DESIGN PHASE - II

Date	09 November 2022
Team ID	PNT2022TMID22106
Project Titile	A Novel Method for Handwritten Digit Recognition System

DATA FLOW DIAGRAM

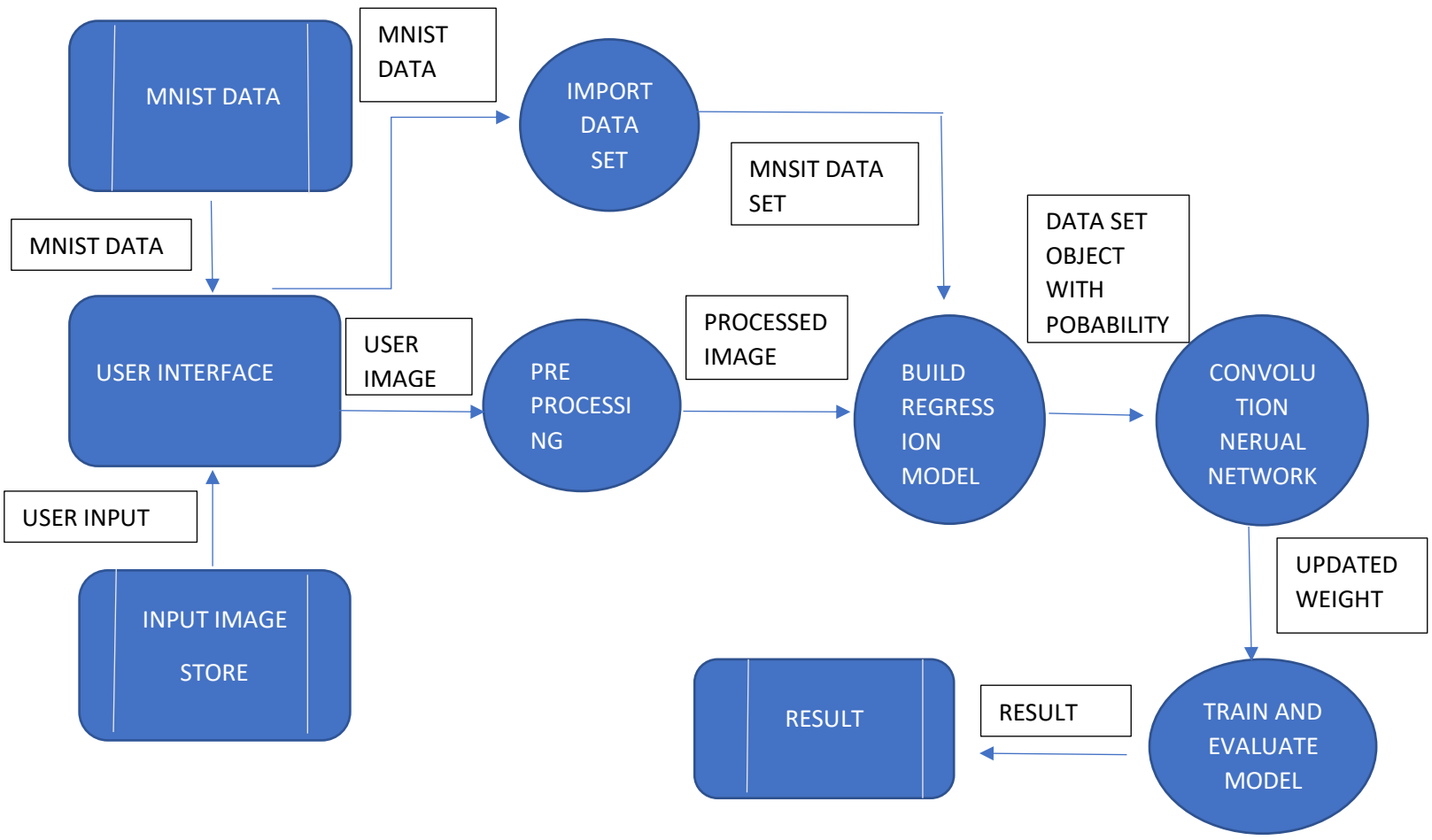
A Data Flow Diagram (DFD) is a conventional visible illustration of the records flows within a machine. A neat and clean DFD can depict the proper quantity of the machine requirement graphically. It suggests how statistics enters and leaves the machine, what modifications the records, and wherein statistics is stored.

DFD Level-0

Level DFD-0 includes two external entities, the user interface and output, as well as a process that represents the CNN for digit recognition. The output is obtained after processing.

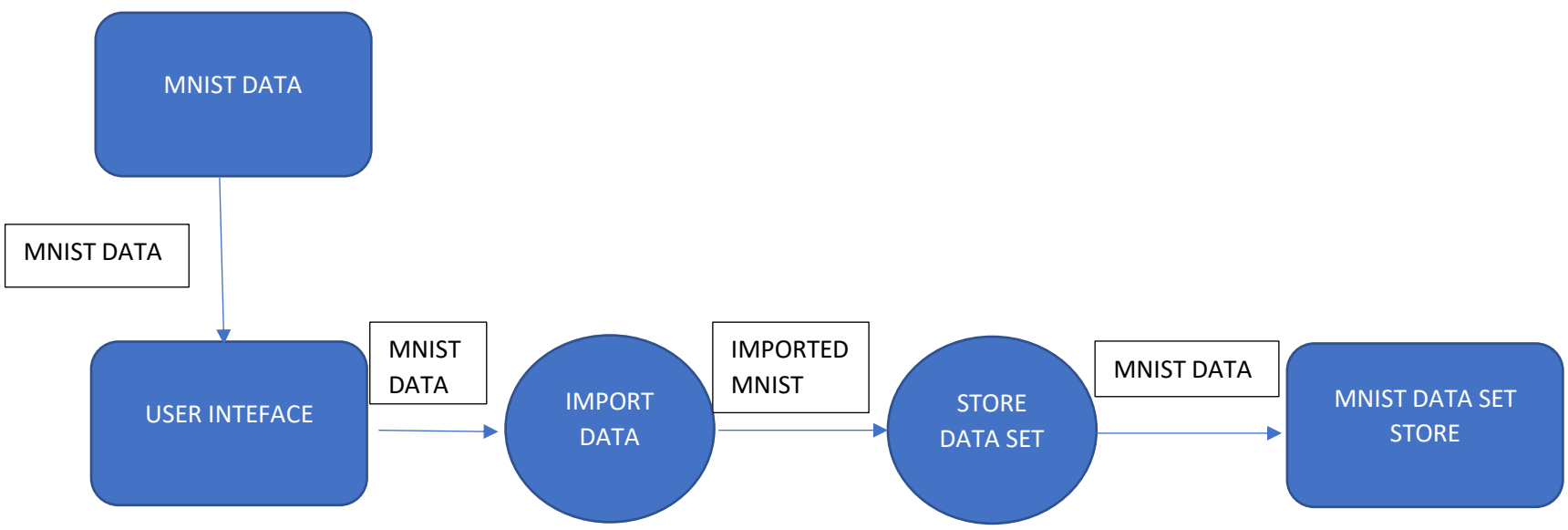
DFD Level-1

Level DFD-1 consists of 2 external entities, a GUI and an output, along with five process blocks and 2 MNIST datastores and input image stores, representing CNN's internal workings for the System. number identification. Block the process of importing MNIST data from the library. The processing block imports the image, processes it, and sends it to the block where the regression model is built. It sends probabilistic objects to the CNN where the weights are updated and some classes are constructed. Block training and model evaluation to produce outputs.



DFD Level-2

The DFD Level-2 for import data(figure 4) consists of two external data and one entity UI along with three process blocks, representing the three functionalities of the CNN for Digit Recognition System. It imports data from MNIST data store and stores on the system.



USER STORIES

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High	Sprint-1
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High	Sprint-2
		USN-3	As a user, I can register for the application through gmail or facebook	I can register & access the dashboard with Facebook Login	Medium	Sprint-2
	Login	USN-4	As a user, I can log into the application by entering email & password	I can login to the application	High	Sprint-1
	Dashboard	USN-5	Go to dashboard and refer the content about our project	I can read instructions also and the home page is user-friendly.	Low	Sprint-1
	Upload Image	USN-6	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-3
	Predict	USN-7	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-8	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-4
Customer (Web user)	Login	USN-9	As a user, I can use the application by entering my email, password.	I can access my account	Medium	Sprint-4
Customer Care Executive	Dashboard	USN-10	upload the image	Recognize and get the output	High	Sprint-1
Administrator	Security	USN-11	updated the features	checking the security	Medium	Sprint-1