Project Design Phase-II
Data Flow Diagram & User Stories

Date	16 October 2022
Team ID	PNT2022TMID08626
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.

```
                    Start

              Input the digit image

                Is
            digit image          Yes
            grayscale?

                No

           Convert to grayscale

         Apply filtering(Remove
        background and noise from
            the digit image)

          Detect edges from digit
                image

          Convert to binary images

              Image dilation

         Extract features from digit
                image

               Test image

             Digit Recognition

            Display the output

                    Stop
```
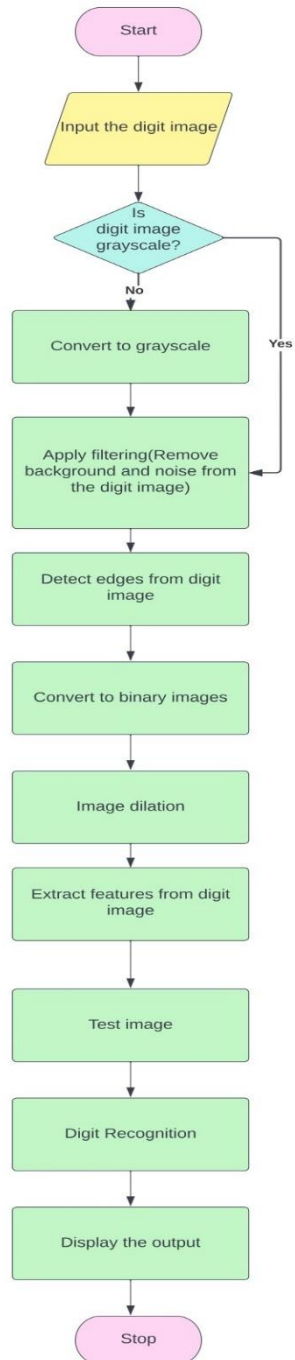
User Stories:

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
User in website	Registration	USN-1	User can register for the application by entering username, email, password and phone number.	Account specific tasks and actions can be performed	High	Sprint-1
	Login	USN-2	Enter the Username and Password to login to the application.	Right account credentials should be entered	High	Sprint-1
	Dashboard	USN-3	User can view the website		Medium	Sprint-2
Core development team	Core function	USN-4	Design the application in a way such that it provides good user interface.	Interface should be user friendly and easy to use	High	Sprint-3
		USN-5	The website should be responsive on all devices irrespective of screen sizes.	User experience should be taken into account	Medium	Sprint-3
		USN-6	Dataset collection and processing	Efficient data should be collected	High	Sprint-3
Maintenance team	Maintenance	USN-7	The website should be maintained and user queries should be fixed as quickly as possible		High	Sprint-4
User in website	Upload the handwritten image	USN-8	User should upload the handwritten images of digits which is to be processed.	The input image should be in proper format.	High	Sprint-4
	View output	USN-9	The system detects the digits and displays the output to the user.		High	Sprint-4