**Project Design Phase-II Data Flow
Diagram & User Stories**

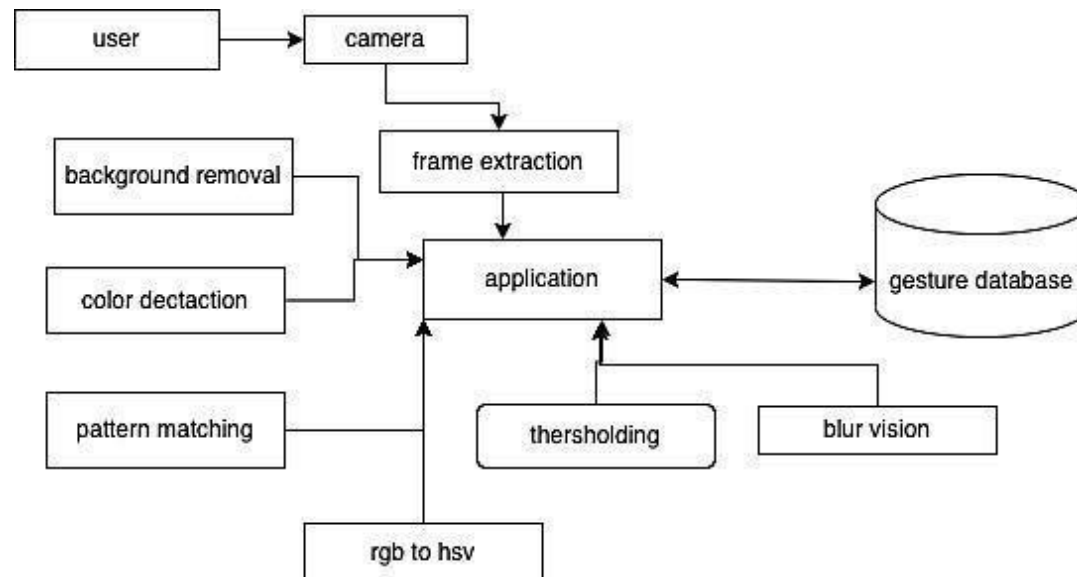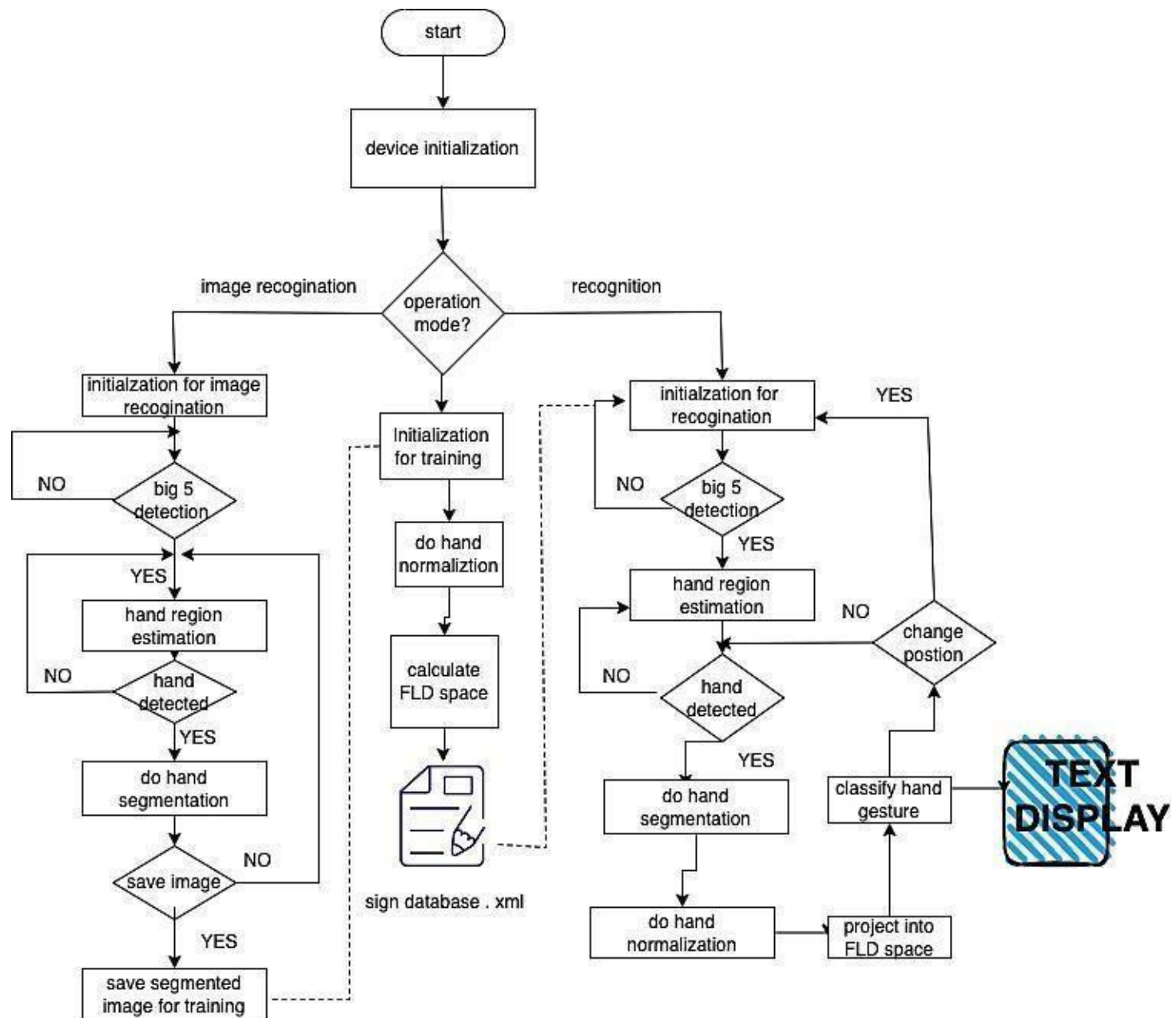| Project Name	Real -Time Communication System Powered By AI For Specially Abled
Team ID	PNT2022TMID19449
Maximum Marks	4 Marks

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. **Example: (Simplified)**

Example: DFD Level 0 (Industry Standard)

```
                           ┌─────────┐
                           │  start  │
                           └─────────┘
                                │
                    ┌───────────────────────┐
                    │  device initialization │
                    └───────────────────────┘
                                │
                          ◇ operation mode? ◇
   image recognition ←────                    ────→ recognition
```

start

device initialization

operation mode?

image recogination — recognition

initialzation for image recogination

Initialization for training

initialzation for recogination

big 5 detection — NO — YES

big 5 detection — NO

YES

hand region estimation

do hand normaliztion

hand region estimation

hand detected — NO

YES

calculate FLD space

hand detected — NO

change postion — NO

YES

do hand segmentation

do hand segmentation

classify hand gesture

TEXT DISPLAY

save image — NO

sign database . xml

do hand normalization

project into FLD space

YES

save segmented image for training

User Stories

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Customer *(Desktop user)*	Registration	USN-1	**Not Required**	The user may access my dashboard or account.	High	Sprint-1
	Login	USN-2	**Not Required**		High	Sprint-1
	Dashboard	USN-3	**Not Required**			
Customer *(Desktop user)*	**Main page**	USN-4	Once user click, user can enter the website as a user and get the instructions for using the software.	After clicking, the user may access the website.	Medium	Sprint-1
Customer (Desktop user)	**Guidelines**	USN-5	The user can read the instructions to learn how the application works.	The user can review the instructions.	Medium	Sprint-1
Customer *(Desktop user)*	**Convert Sign**	USN-6	A user can access the Main screen by clicking the Convert sign button.	When a user clicks the Convert button, I am sent to the main screen**.**	Medium	Sprint-2
Customer *(Desktop user)*	**Camera(Hand movement detection)**	USN-7	A user can enter text by waving my hand gestures in front of the camera.	My hand signal may be correctly displayed to the camera by the user.	High	Sprint-2
Customer *(Desktop user)*	**Voice mode**	USN-8	Once the text has been received, the user can select the voice option to hear the text spoken.	The voice mode, which presents the text as speech, can be selected by the user.	High	Sprint-2
Customer Care Executive	**Provide the necessary functionalities required to use the app.**		Users may submit the necessary camera specifications and other details as executives, ensuring the software runs well.	The necessary camera specifications and other information can be provided by the user.	Low	Sprint-1
Customer Care Executive	**Check the performance of the app**		A user can review the use and enquiries received from end users in their capacity as an executive.	The use and questions received from the end users are viewable by the user.	Medium	Sprint-1

Administrator	Receive queries based on the usage		In order to help the users of the app utilise it successfully, an administrator may take the questions from the customer service and repeat the testing step while loading the other indicators in the dataset.	The user can ask the customer service representative questions and repeat the necessary steps.	High	Sprint-2