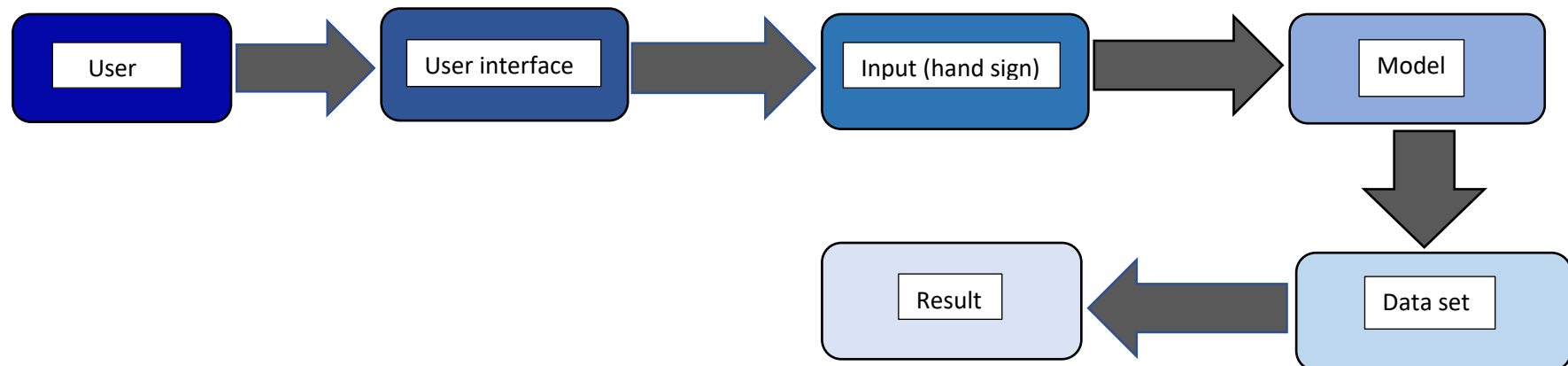# Project Design Phase-II
Data Flow Diagram & User Stories

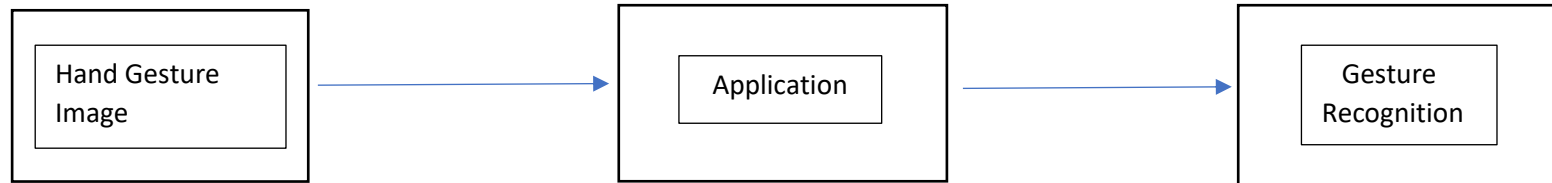| Team ID	PNT2022TMID16461
Project Name	A Gesture – Based Tool for Sterile Browsing of Radiology Images

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.
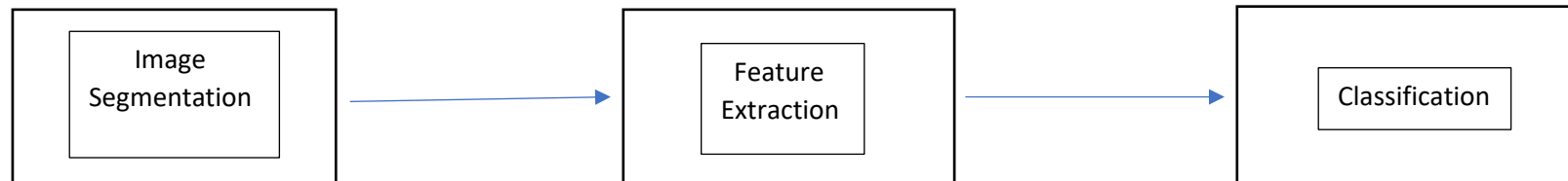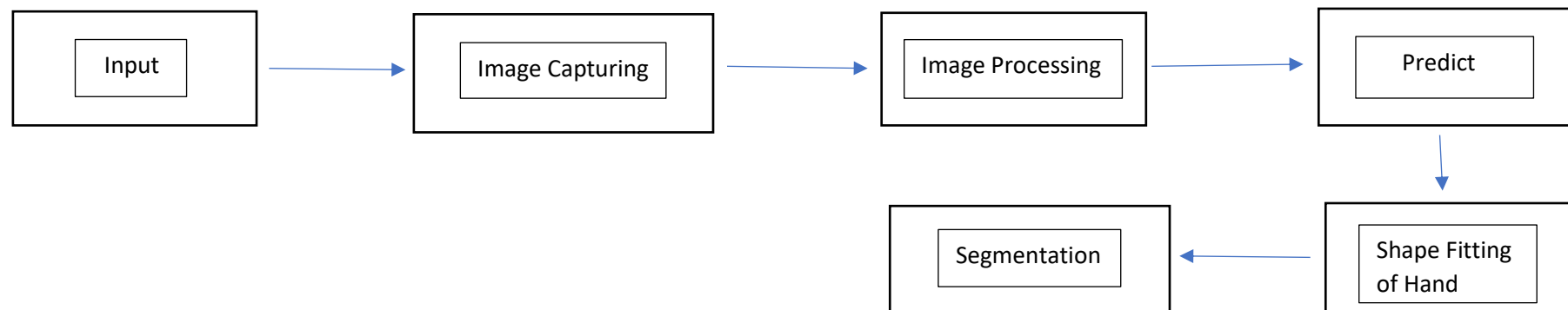
Simplified:

Data Flow Diagram-Level 0

```
┌─────────────────────┐        ┌─────────────────────┐        ┌─────────────────────┐
│  ┌───────────────┐  │        │  ┌───────────────┐  │        │  ┌───────────────┐  │
│  │ Hand Gesture  │  │───────▶│  │  Application  │  │───────▶│  │   Gesture     │  │
│  │ Image         │  │        │  └───────────────┘  │        │  │  Recognition  │  │
│  └───────────────┘  │        │                     │        │  └───────────────┘  │
└─────────────────────┘        └─────────────────────┘        └─────────────────────┘
```

Data Flow Diagram-Level 1

```
┌─────────────────────┐        ┌─────────────────────┐        ┌─────────────────────┐
│  ┌───────────────┐  │        │  ┌───────────────┐  │        │  ┌───────────────┐  │
│  │    Image      │  │───────▶│  │   Feature     │  │───────▶│  │Classification │  │
│  │ Segmentation  │  │        │  │  Extraction   │  │        │  └───────────────┘  │
│  └───────────────┘  │        │  └───────────────┘  │        │                     │
└─────────────────────┘        └─────────────────────┘        └─────────────────────┘
```

Data Flow Diagram-Level 2

```
┌──────────────┐     ┌──────────────────┐     ┌──────────────────┐     ┌──────────────┐
│  ┌────────┐  │     │  ┌────────────┐  │     │ ┌─────────────┐  │     │ ┌──────────┐ │
│  │ Input  │  │────▶│  │   Image    │  │────▶│ │   Image     │  │────▶│ │ Predict  │ │
│  └────────┘  │     │  │ Capturing  │  │     │ │ Processing  │  │     │ └──────────┘ │
│              │     │  └────────────┘  │     │ └─────────────┘  │     │              │
└──────────────┘     └──────────────────┘     └──────────────────┘     └──────┬───────┘
                                                                               │
                                                                               ▼
                         ┌──────────────────┐              ┌──────────────────┐
                         │ ┌─────────────┐  │              │ ┌──────────────┐ │
                         │ │ Segmentation│  │◀─────────────│ │Shape Fitting │ │
                         │ └─────────────┘  │              │ │  of Hand     │ │
                         │                  │              │ └──────────────┘ │
                         └──────────────────┘              └──────────────────┘
```

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[surgeon] (user)	Launch	USN-1	As a user, I can launch the webpage to upload and manipulate the scan images	I can access the webpage	High	Sprint-4
		USN-2	As a user, I can use different web browser	I can access the webpage using different web browser	High	Sprint-1
Administrator		USN-1	Access the database	Database Management	High	Sprint-3
		USN-2	Server crash, database recovery	Resolve the errors or issue, recover the last data from the database	High	Sprint-5
Customer care executive	Availability	USN-1	Interpret and recognize gesture inaccurately	Webcam detection	Medium	Sprint-5
		USN-2	When the website is unresponsive or an internal error occurs in the Website	Webpage is unresponsive	Medium	Sprint-5
	Predict	USN-3	As a user I can turn on the camera using predict button	I can turn on camera for prediction	High	Sprint-3
		USN-4	Predicating the images using Hand Gesture	I can resize, blur, and flip my image using my hand gesture	High	Sprint-3
		USN-5	I can give a gesture of raised fist and it recognize	I can get my fixed resized image	High	Sprint-4
		USN-6	I can show my index finger	I can get a rectangular image	High	Sprint-4
		USN-7	I can show my index finger ,middle finger and ring finger at once	I can get my image blurred	High	Sprint-4