Project Design Phase-II

Data Flow Diagram & User Stories

Date	03 October 2022
Team ID	PNT2022TMID38566
Project Name	A Gesture Based Tool For Sterile Browsing Of Radiology Images
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.
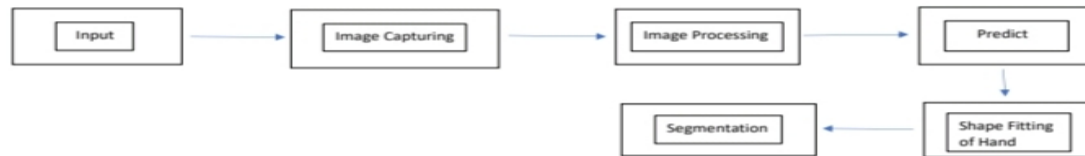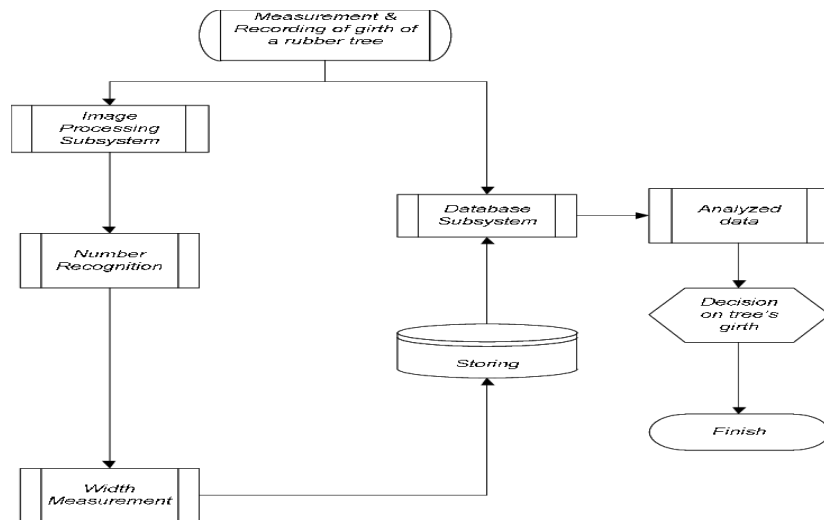
Simplified:

Data flow diagram :

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

Image processing:

```
                    ┌────────────────────────────┐
                    │  Measurement &             │
                    │  Recording of girth of     │
                    │  a rubber tree             │
                    └────────────────────────────┘
                       │                    │
          ┌─────────────┐                   │
          │ Image       │                   │
          │ Processing  │                   │
          │ Subsystem   │                   │
          └─────────────┘                   │
               │                            │
               ▼                            ▼
          ┌─────────────┐          ┌──────────────┐      ┌──────────────┐
          │ Number      │          │ Database     │─────▶│ Analyzed     │
          │ Recognition │          │ Subsystem    │      │ data         │
          └─────────────┘          └──────────────┘      └──────────────┘
               │                        ▲                      │
               │                   ┌─────────┐                 ▼
               │                   │ Storing │          ┌──────────────┐
               │                   └─────────┘          │  Decision    │
               ▼                        ▲               │  on tree's   │
          ┌─────────────┐               │               │  girth       │
          │ Width       │───────────────┘               └──────────────┘
          │ Measurement │                                      │
          └─────────────┘                                      ▼
                                                        ┌──────────────┐
                                                        │   Finish     │
                                                        └──────────────┘
```
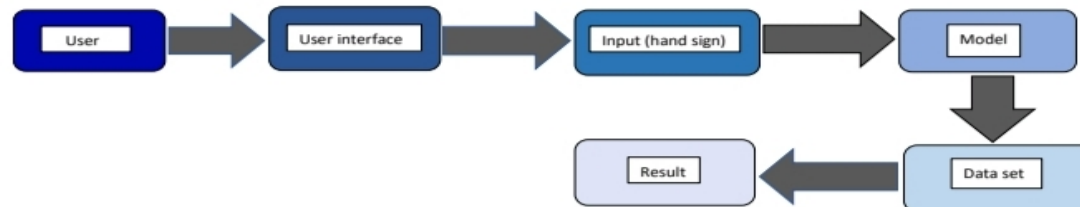
User stories :

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	Login	USN-1	Entering Webpage	I can enter the application	High	Sprint-1
	Login	USN-2	As a user,I will entering to the "Homepage" of the UI(Webpage)	I can enter the homepage	High	Sprint-1
	Homepage	USN-3	As a user,I can click on the "About" to details about the Application	I can get a Details about the Application	Low	Sprint-2
Administrator	About	USN-4	As a user, I can upload my radiology image from the computer	I can choose any image from my device	High	Sprint-2
	Begin	USN-5	As a user,I can turn on the camera using predict button	I can turn on cameras for prediction	High	Sprint-3
Customer care(surgeon	Predict	USN-6	As a user,I will Predict the images using Hand Gesture	I can resize, blur, and flip my image using my hand gesture	High	Sprint-3
		USN-7	As a user,I can give a gesture of raised fist and it recognizes	I can get my fixed resized image	High	Sprint-4
		USN-8	I can show my index finger	I can get a rectangular image	High	Sprint-4