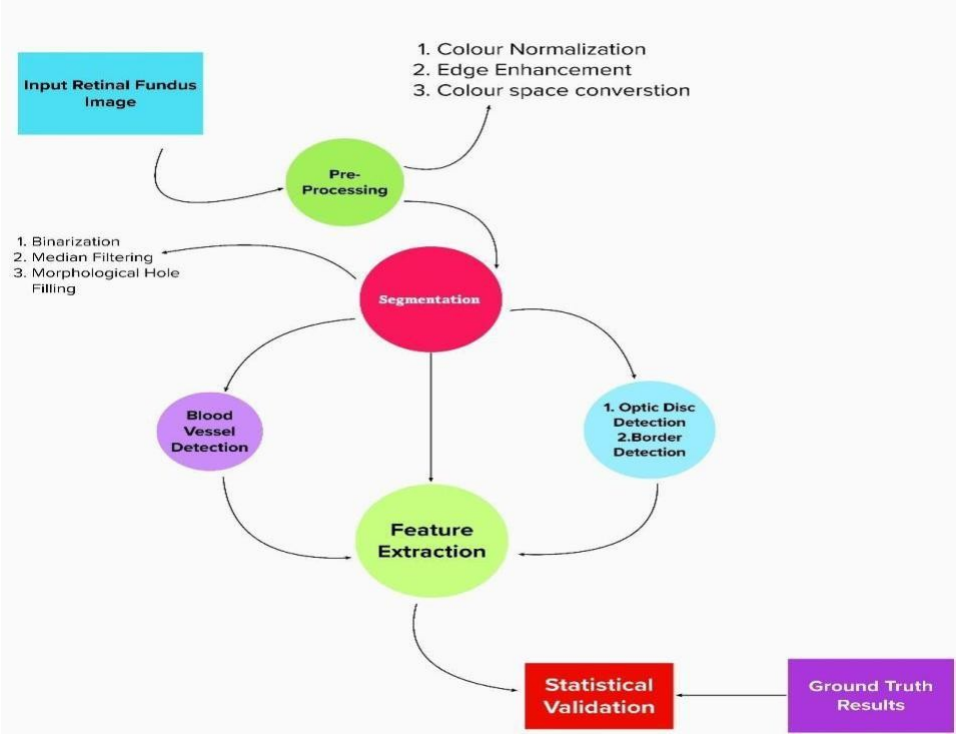
Project Design Phase-II
Data Flow Diagram & User Stories

Date	12 November 2022
Team ID	PNT2022TMID41310
Project Name	Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy
Maximum Marks	4 Marks

Data Flow Diagrams:

The classic visual representation of how information moves through a system is a data flow diagram (DFD). The ideal amount of the system needs can be graphically represented by a tidy and understandable DFD. It demonstrates how information enters and exits the system, what modifies the data, and where information is kept.



- Diabetic retinopathy disease is frequently detected and examined using retinal fundus Pre-processing of raw retinal fundus images is performed using extraction of the green channel, histogram equalization, image enhancement, and resizing techniques.
- One of the main tasks in retinal image processing is the segmentation of the retinal vasculature from images of the eye fundus.
- By omitting the optic disc (OD) region of the retina, the computer-assisted automatic recognition and segmentation of blood vessels.
- Mathematical binary morphological techniques are used to identify the retinal blood vessels.
- The term "feature extraction from the fundus images for the diagnosis of Diabetic Retinopathy" refers to a sophisticated eye screening technique that allows for the early detection of eye-related disorders.

User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Patient (Web user)	Registration	USN-1	I can register as a user on the website with either an email address or a phone number and password.	I can create my account.	High	Sprint-3
	Login	USN-2	With the provided Login credentials, I can access the website as a user.	I can log in and access my account.	High	Sprint-3
	Upload image	USN-3	I can post my data as a user in formats like pdf and doc.	I can upload my data.	Medium	Sprint-3
Administration (Web developer)	Admin Login	USN-4	I can log in to the website as the admin and analyze the user information.	I can log in and analyze the user data.	High	Sprint-3
	Data collection	USN-5	I can gather the dataset for the DR from the source as an admin.	I can collect the dataset.	Low	Sprint-1
	Create model	USN-6	I can build the model and train it using the dataset as an administrator to make predictions.	I can create and train the model.	High	Sprint-1
	Test the model	USN-7	I can evaluate the model's predictive abilities as an admin.	I can test the model.	High	Sprint-2
Patient (Web user)	Diagnosis	USN-8	I can access the application's diagnosis results as a user and continue with treatments..	He/she can get the results and continue the treatment.	High	Sprint-2