

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

Date	16 October 2022
Team ID	PNT2022TMID24490
Project Name	Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy
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.

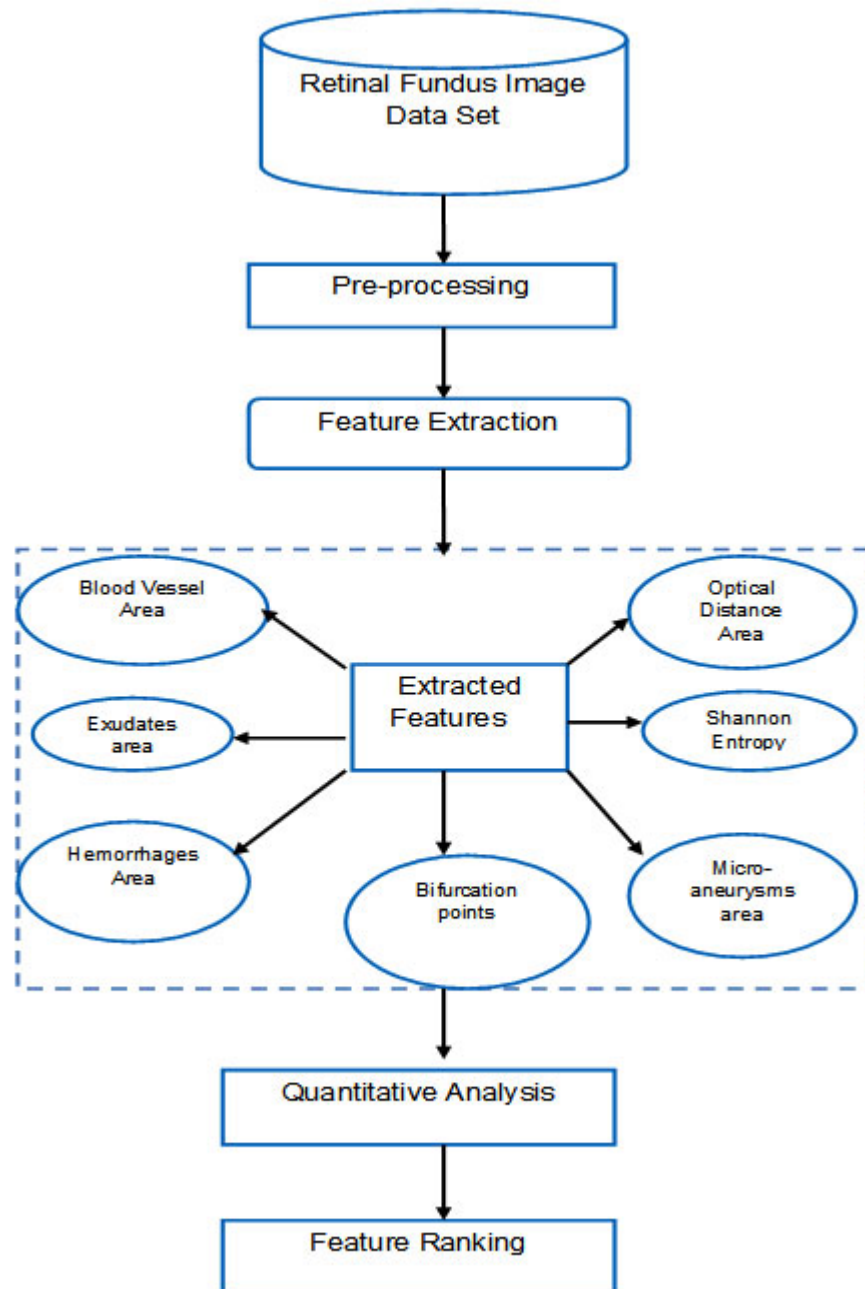


Figure 1: Process Flow for Feature Ranking Retinal Fundus Images

## 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 (Mobile user)	Registration	USN-1	As a user, I can check whether I have Retinopathy or not by uploading the image of my eye by entering details.	I can upload or take image.	High	Sprint-1
	Screening method	USN-2	As a user, I can find the method more efficient and accurate.	It prevents the chances of unwanted infections in the patient's eye	High	Sprint-1
		USN-3	As a user, I can use it with minimal physical interaction with the device.	I can take the device to the residence of patients if they are unable to visit the hospital/clinic.	High	Sprint-2
	Physical feature	USN-4	As a user, I can find it portable and light weight.	I can perform the screening procedure without any fear and hesitation.	Low	Sprint-2
	safety	USN-5	As a user, I can be safe as the detection method is free from radiations.	Pain due to testing is the major fear factor that prevents the patients from visiting the hospital.	High	Sprint-4
Customer (Diabetic Patient)	Testing	USN-6	As a user, I can undergo testing without any fear of pain as this method is pain-free.	Pain due to testing is the major fear factor that prevents the patients from visiting the hospital	Medium	Sprint-2
		USN-7	As a user, I will be comfortable as it requires minimum/no human involvement.	The screening is carried out using a computer robot along with the aid of AI technology.	Low	Sprint-4

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
	Results	USN-8	As a user, I can rely on the results without any suspicion.	The technique is almost 100% efficient as it involves Modern techniques incorporated with Machine Learning	High	Sprint-3
		USN-9	As a user, I can benefit from the result as it will help me know whether treatment is necessary or not.	It can prevent me from vision loss.	High	Sprint-1
		USN-10	As a user, I can use it with minimal physical interaction with the device.	I can take the device to the residence of patients if they are unable to visit the hospital/clinic.	High	Sprint-2
Customer (Public Sector/Private Sector)	Cost Efficiency	USN-11	As a user, I can reach many people suffering from diabetes	Diabetic patients are more vulnerable to Diabetic Retinopathy	Medium	Sprint-1
		USN-12	As a user, I can create awareness among diabetic patients to undergo frequent screening	As the technique is of low cost, patients will find it very useful.	Low	Sprint-3
	Results	USN-13	As a user, I can complete the screening process within minutes for a single patient	The random results generated by the device saves time	High	Sprint-2