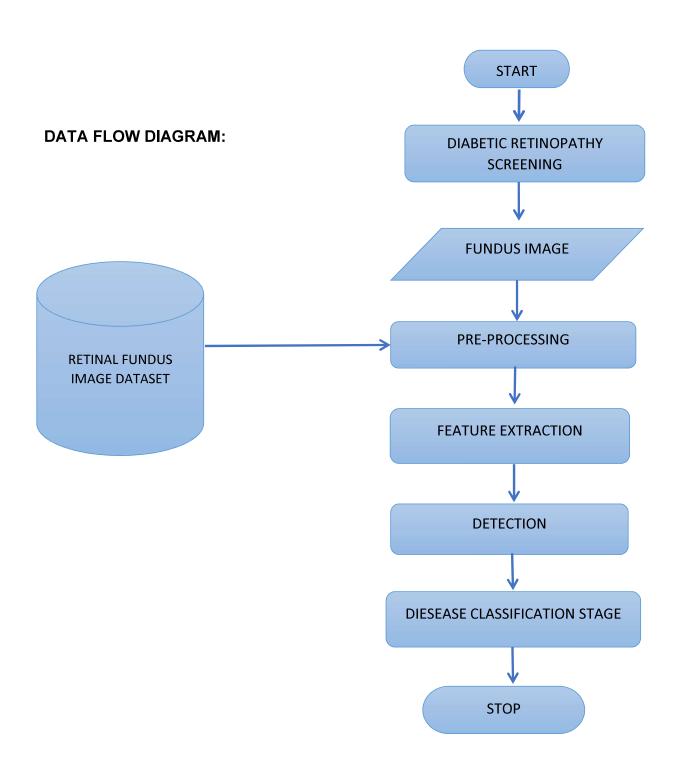
Project Design Phase-II Data Flow Diagram & User Stories

| Date | 16 October 2022 |
|---------------|---|
| Team ID | PNT2022TMID04135 |
| 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.



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 Al 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 | Hlgh | 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 get the results on the spot immediately after the screening process. | It prevents further delay in the treatment process. | Low | Sprint-4 |
| Customer (Public Sector/Private Sector) Results | 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 |