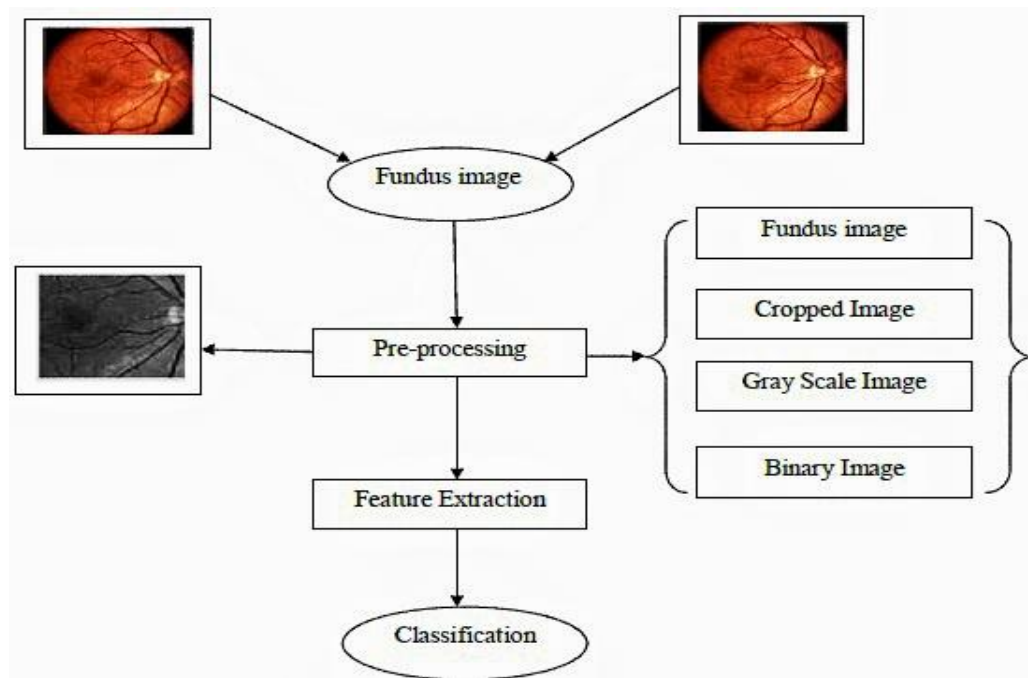


Project Design Phase-II Technology Stack (Architecture & Stack)

Date	03 October 2022
Team ID	PNT2022TMID22755
Project Name	Project – Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy
Maximum Marks	4 Marks

Technical Architecture:



Reference: <https://www.matlabclass.com/2020/02/matlab-code-of-diabetics-retinopathy.html>

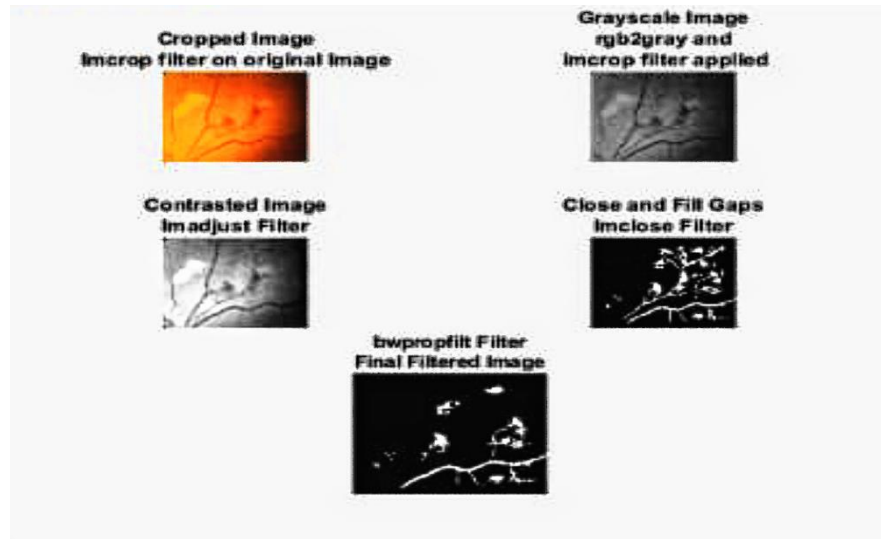


Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User	User interacts with application Matlab.	MATLAB
2.	Fundus image	Logic for real-time image quality assessment, lesion detection and grading using fundus image from patient with diabetes.	Image Processing
3.	Pre-processing	A preliminary processing of data in order to prepare it for the primary processing or for further analysis.	Image Processing
4.	Feature Extraction	Feature extraction from the fundus images for the diagnosis of Diabetic Retinopathy.	Image Processing
5.	Post-processing	The fundus image contains more than 5 spots then the eye is diseased & less than 5 the eye is normal.	MATLAB

Table-2: Application Characteristics:

S .No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Numpy	MATLAB
2.	Security Implementations	Highly Secured MATLAB	MATLAB
3.	Scalable Architecture		MATLAB
S. No	Characteristics	Description	Technology
4.	Availability	The spots is clearly visible under the processing so it is easy for the diagnosis of Diabetic Retinopathy	MATLAB
5.	Performance	It improves the interpretability through visualization based on results.	MATLAB