

# Overview

An interface for processing DR images through the CNN model is created and the predictions are uploaded in the excel sheet according to the respective observation of each persons.

## Technical Overview

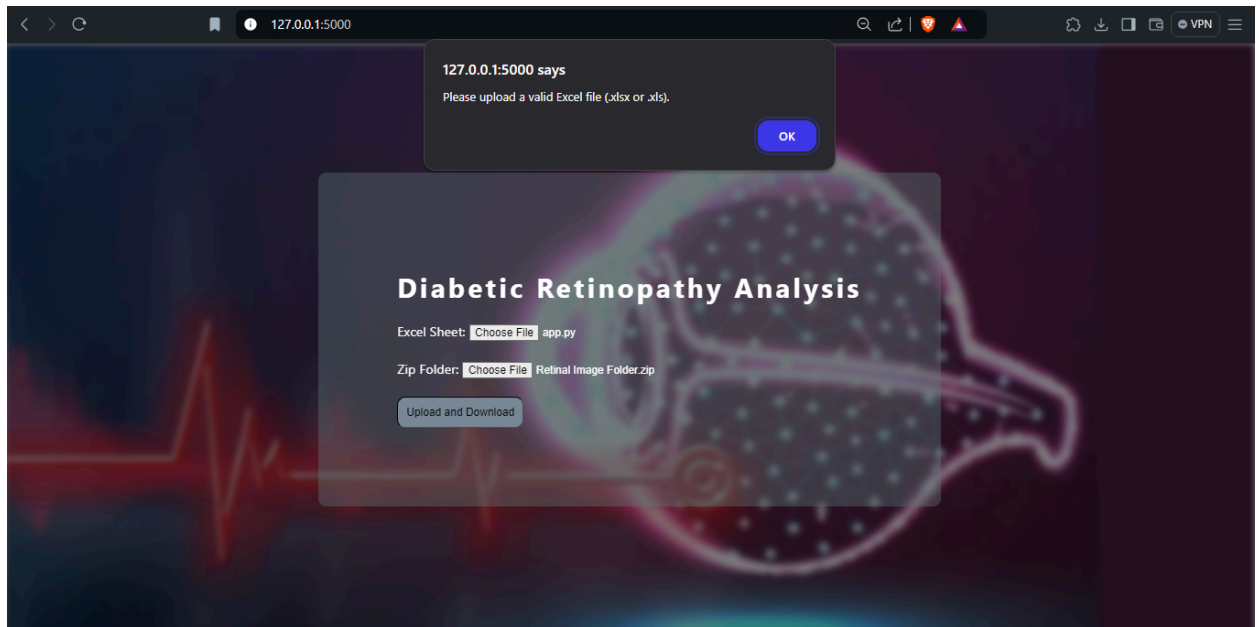
This Flask Web Application allows users to upload an Excel File and a ZIP archive containing retinal images. After the processing of these images with the help of model , the excel sheet gets updated with the predictions and user can download the files.

Tech Stacks used:-

- Flask
  - A lightweight web application Python framework
  - Handles HTTP requests and responses, file uploads., handles routing
- Pandas
  - Used to read,update and write excel files
  - Used for dataframe operations
- Zipfile
  - A Python Module that is used for working with ZIP archives.
  - Helps in the extraction of files.
- PIL (Pillow)
  - Used for opening ,resizing and processing images.
- TensorFlow
  - Loads and uses the pretrained Sequential Model for image classification

## Handling File Format Errors while uploading

- Provides a pop up if the file format is wrong.



- Both the files are necessary in their respective format for the processing

## Inputs and outputs

[Input Excel Sheet](#) ( I have deleted the entries in the DR predicted values for left and right eyes)

[Output Excel Sheet](#) (Please download the file locally and check for the prediction values , as google sheets do not display values in scientific notation)

- Drive Link:- (With Code files and Sample Input and Output) -  
📁 Prediscan\_Medtech
- [Github Link](#)
- [Demo Video](#)