Optical Character Recognition (OCR)

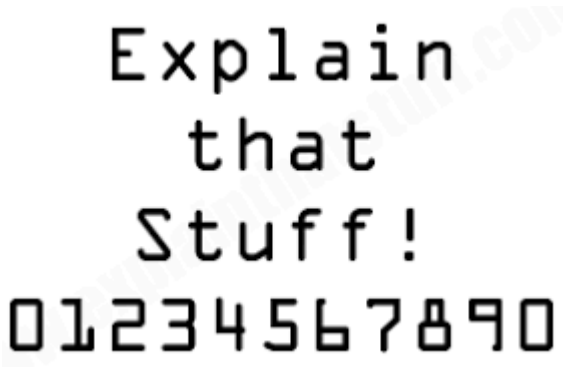
The objective was to implement a Optical Character Recognition system, where we can upload images through a front-end and it will display the extracted text from the image.

There are two primary componenets in this project:

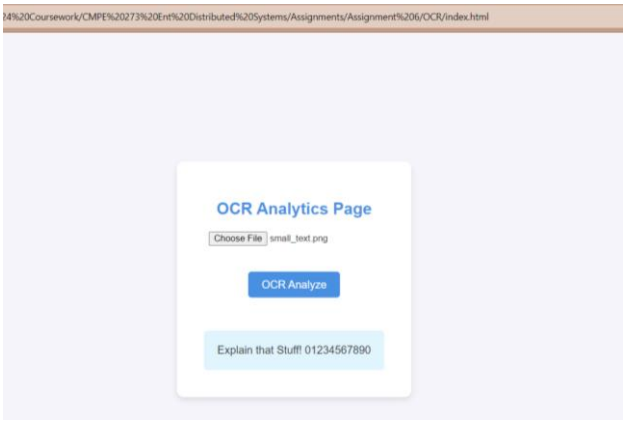
1. Server application (app.py): This flask application receives an image from the frontend and utilizes PIL and pytesseract library to perform text extraction, which it returns as a response. It is assumed that Tesseract-OCR has been installed on the user's system.
2. Frontend application (index.html): This UI application allows users to upload and submit images and receive the extracted text from the image as a response.

The code for the same is available on Github.

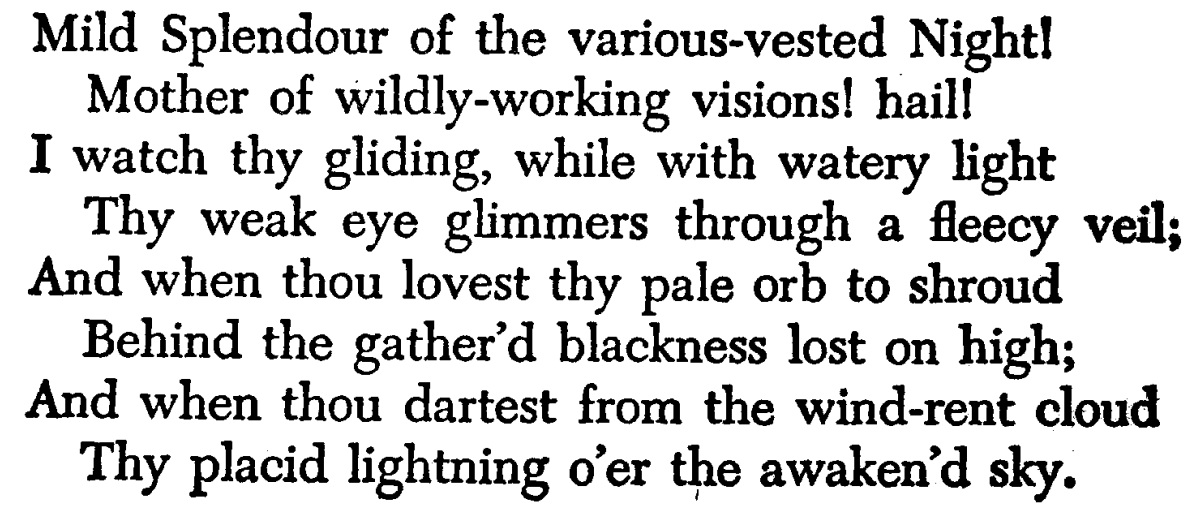
I used two different images to test this application. The first image I used is shown below.



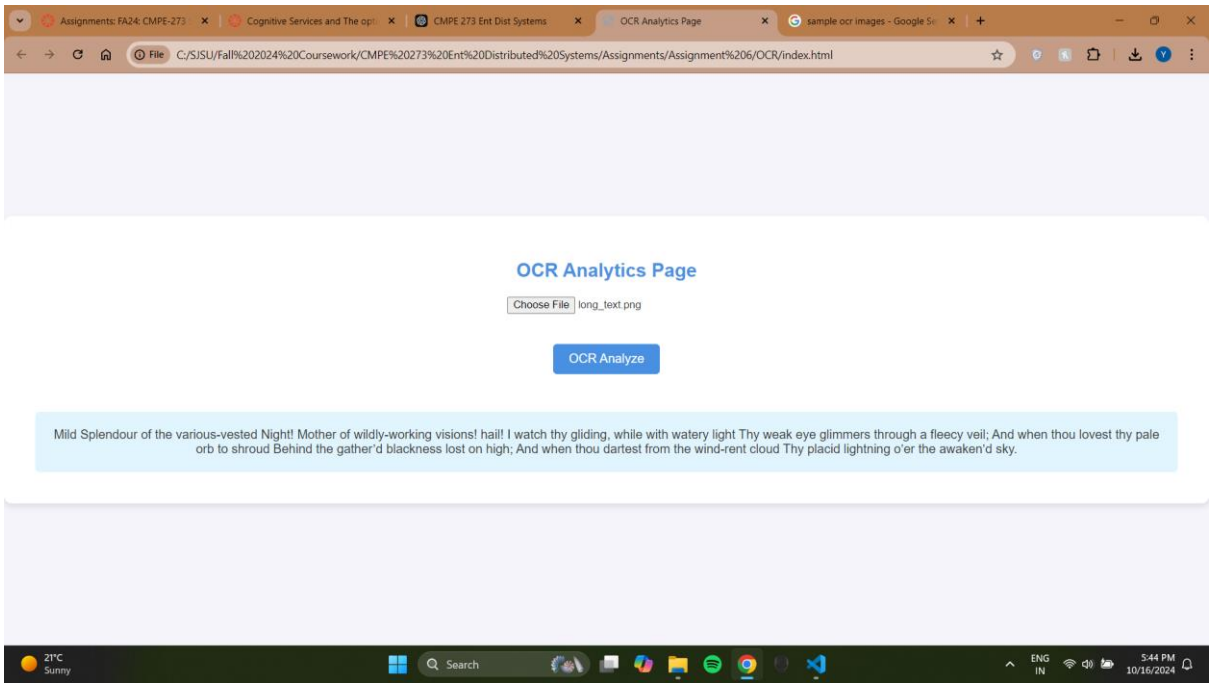
When passed through Tesseract on the backend, we received the following response. As we can see, it has extracted the text and displayed it correctly.



For the second image, I chose longer text. The image is shown below.



For this image, the response I received extracted the text again and displayed it on the screen, as shown below.



As we can observe, the application is able to integrate Tesseract and perform OCR on images containing text.