RAJSHAHI UNIVERSITY OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Project Report

COURSE NO: CSE 3200

COURSE TITLE: Software Development Project II

Project Name: Read It Out

SUBMITTED BY

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Project Name: Read it out.

Objective: One image has been taken here, which has been converted into text and speech. People who are blind or have poor vision will find it to be quite beneficial. They will benefit if a program turns any image into speech because they typically rely on their hearing. Consequently, blind people are able to understand the content of any particular article with ease.

Components: Jupyter Notebook have been used to run our python code. There are some modules that are required to successfully run the code such as pytesseract, pyttsx3, cv2, tkinter etc.

Functionality: Here, two different program has been used. One is to open webcam and capture and save the image. Another one is to convert that image to text and speech.
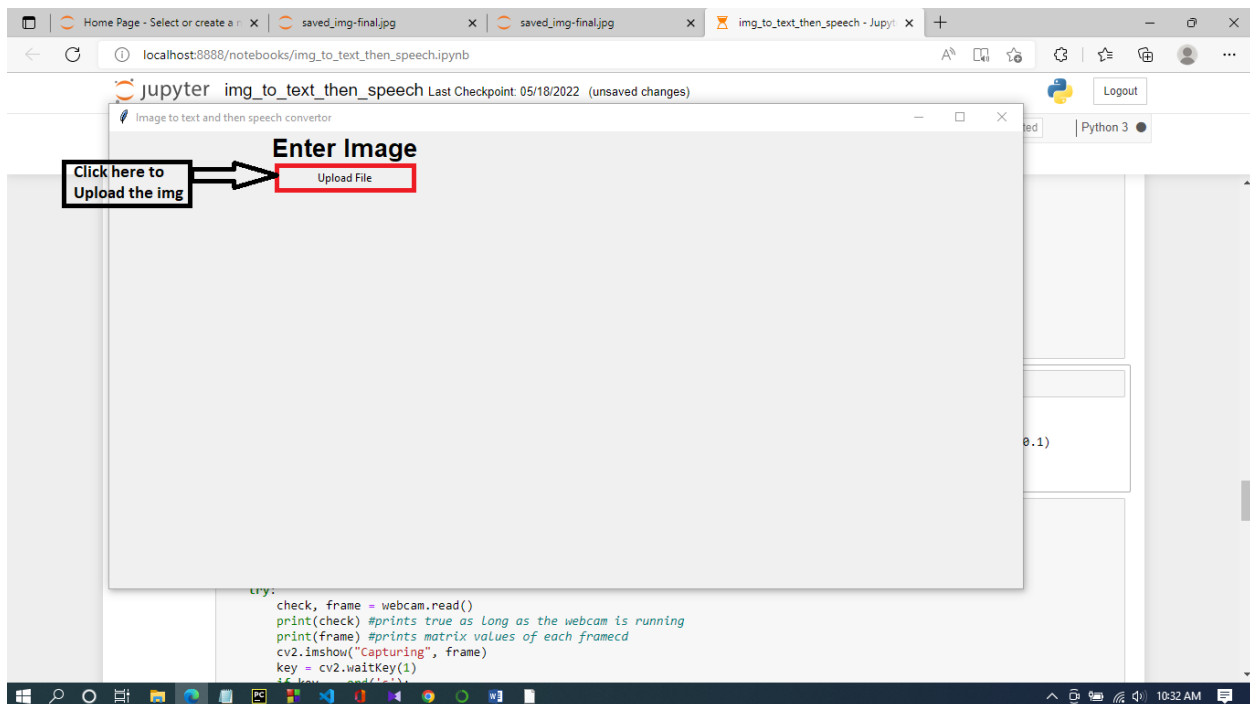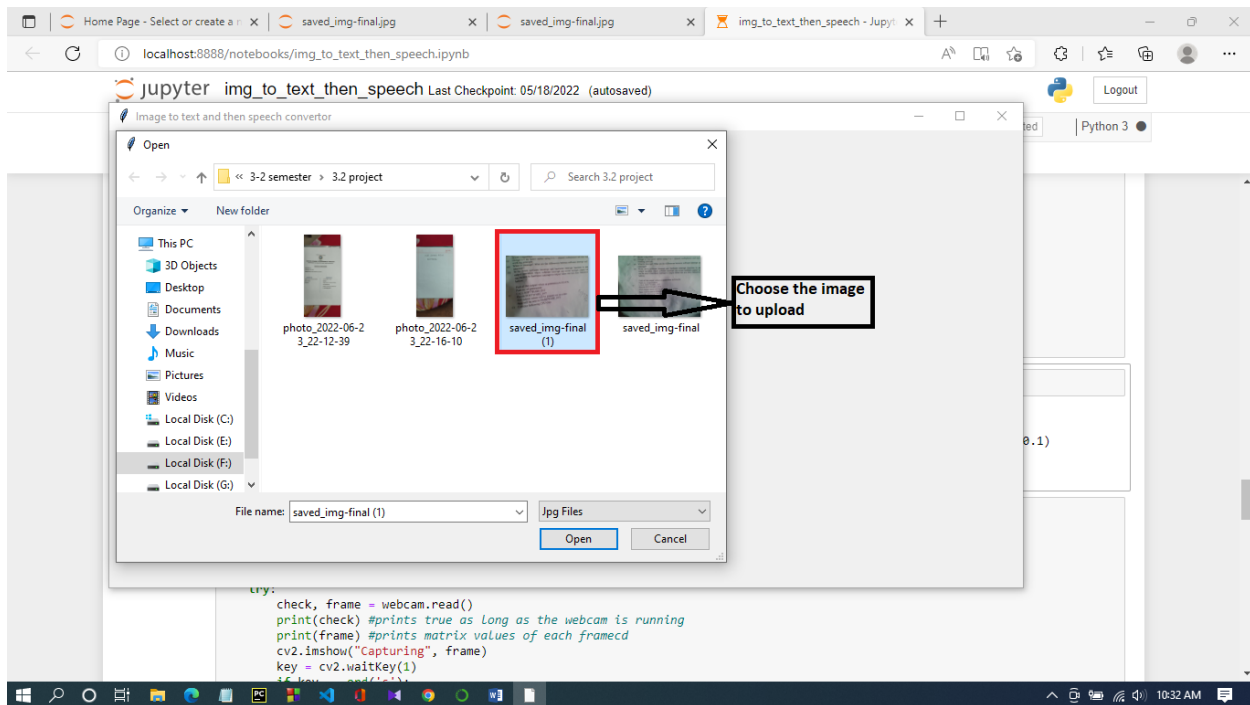
Opening the Webcam after running it:
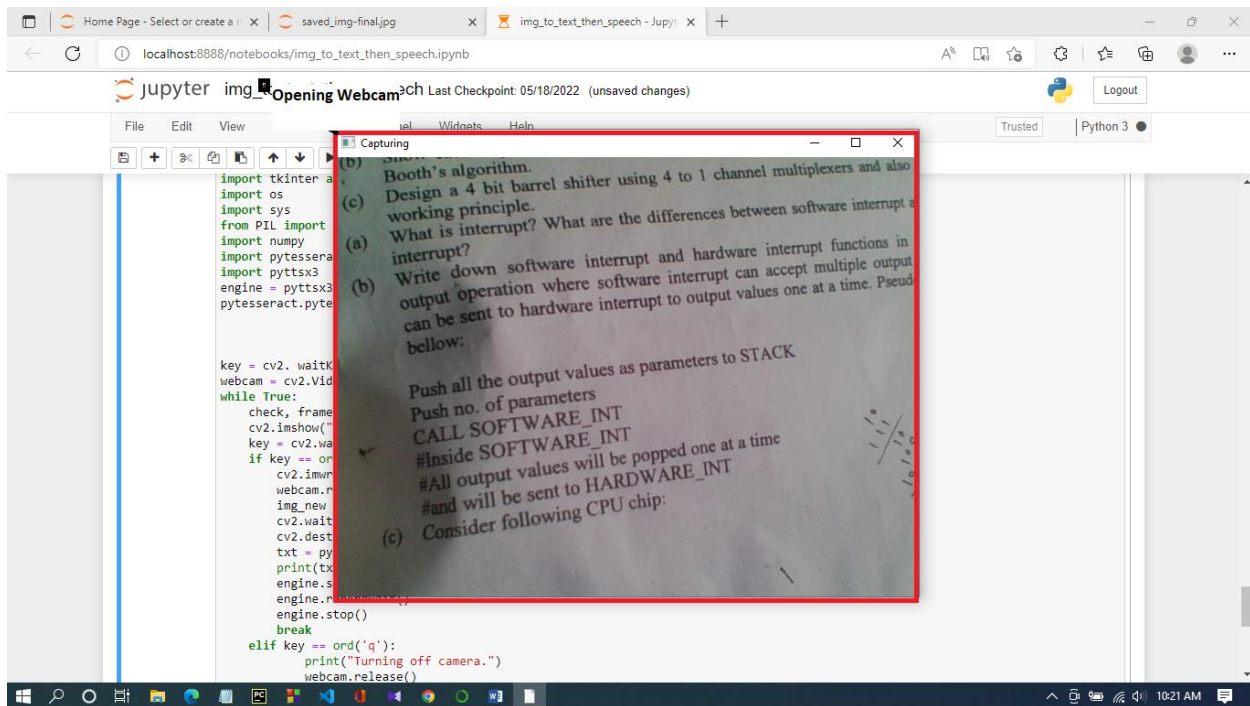
Capturing the image:
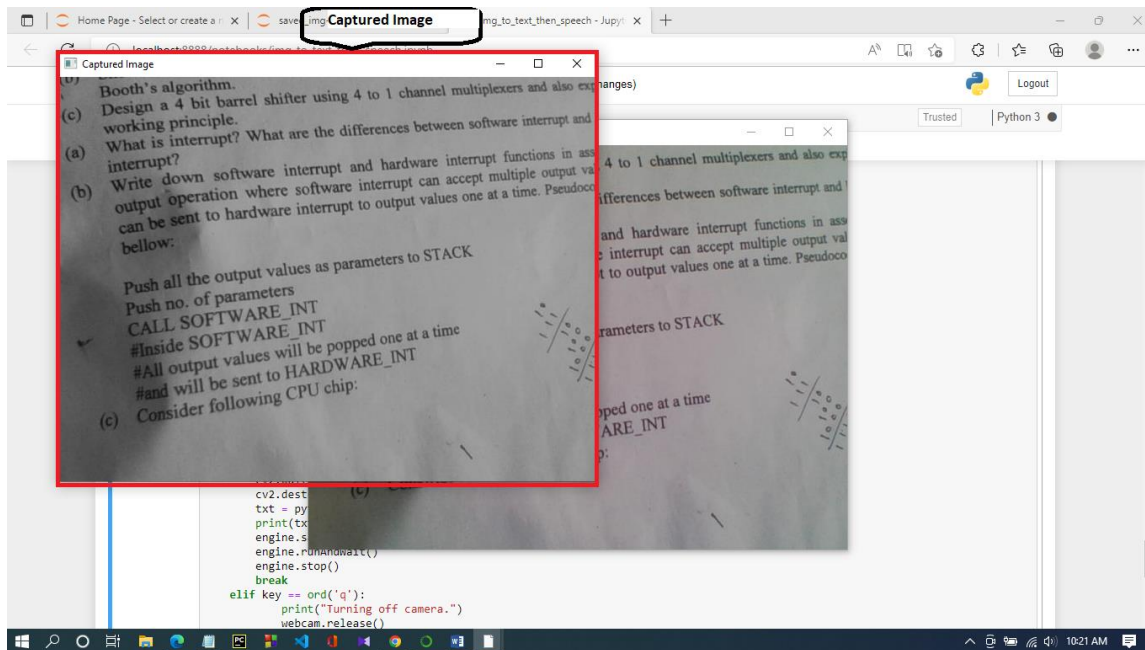
Then after saving that image we need to run the second program to convert it into text. After running that one console will open.

One image is need to be chosen to upload.

Then in console image portion will be uploaded and text portion is converted from it. Then after clicking "Speak the Speech", an audio will be heard narrating the text.
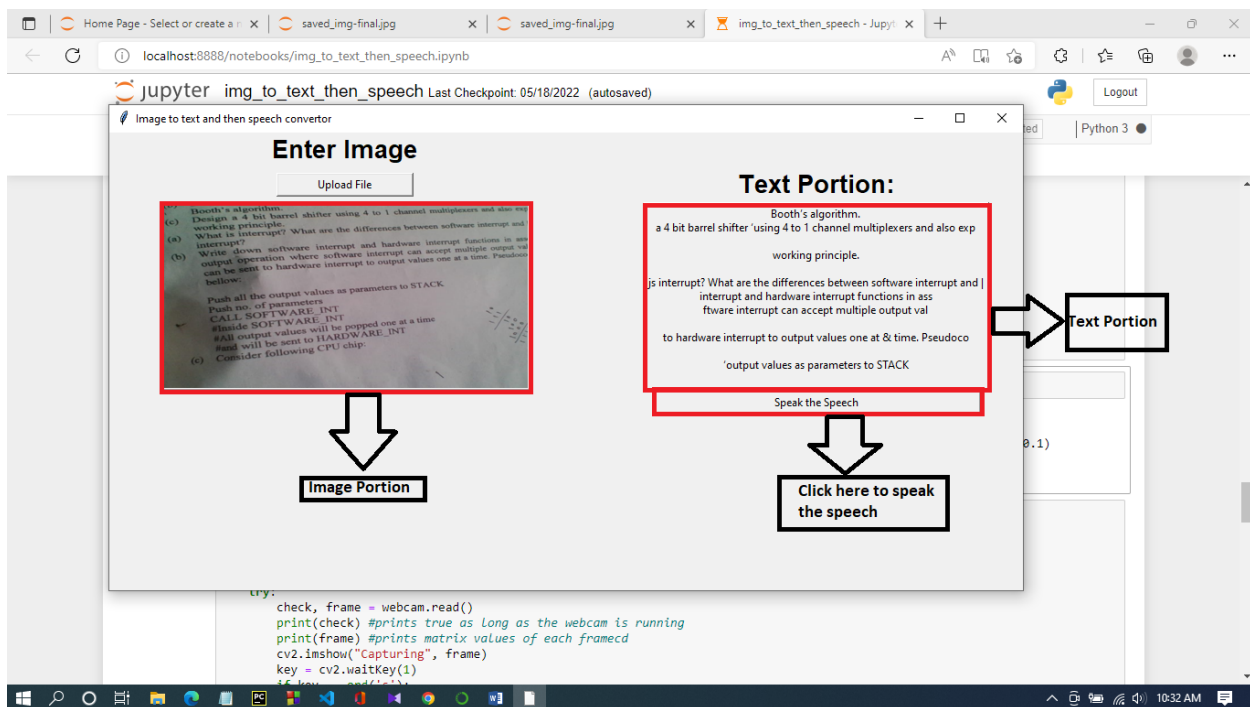
Discussion and Conclusion: This project makes it simple to translate images into text and then speech. But the fact that the two codes are not combined is the project's biggest drawback. There are two distinct interfaces as a result. Prior to uploading, we must first save the image that was captured earlier. If there is a saving option and we can post that image straight, it will be more advantageous. Users will be able to use this project more conveniently and quickly if we can solve that issue. Despite these drawbacks, this project can nevertheless greatly assist a blind person or any person by reading out any image.