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My Notes

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Abstract:Due to the novel disease corona virus, most of the school, colleges preferred taking classes online. While studying through online platforms sometimes you want to note some important points from that video lecture or online class but you are unable to do so because either your writing / typing speed is slow or you need to pause the video more often. Sometimes the focus is more on note making and you are not able to pay attention to the video class.Then you can use the MY NOTES web application. On opening the Web application you need to click the start button, after that the application will take the screenshot manually from the video and then will extract the text from it converting them into the proper notes. Once the notes are made it will destroy the screenshot taken earlier before extraction. The notes will be saved on the local storage. This web application allows users to make long notes easily with just one click. My Notes make the note making process much easier.

Keywords- Online Notes, Optical Character Recognition (OCR),Web Application.

I. INTRODUCTION

Our project My Notes is a web application for generating notes online from video lectures/Live webinars. This web application allows user to screenshot in two options - either manually or the user will select the region on its own.

After taking screenshot the text or images in that screenshot will be extracted using optical recognition and deep learning techniques. Further the notes will be generated from the extracted text. The notes will be saved in local storage. Notes will be in editable document format, which can be converted to any other sharable format.

II.RELATED WORK

The existing work related to this proposed model is a browser extension which allows users to make notes but the user has to type notes manually. Another work found related to this model is web application which only allows user to record the entire video. There is an online website for converting image to text, the user has to manually browse each and every Image, and the text will be generated. There has been a lot of work done in this field but it is mostly inparts. None of the model makes the note making process fully automated from end to end. There are certain optical character recognition (OCR) framework libraries for text extraction.

III.PROPOSED SYSTEM

The proposed system can run on any web browser. It will be able to take screenshots of any video manually or in the default aspect ratio. After taking the screenshot image the proposed system will be able to extract text from the image.

Fig 2.Document Format

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After text extraction it will be generate an editable document file which will have the extracted text. This document will further can be converted to any other sharable format.

IV. SYSTEM DESIGN

1.Frontend:
The frontend of the system has been kept quite simple to make it easier for the users to access it. Here there 3 options as of now: YouTube, Zoom and Google Meet. Considering these three are most widely used for online classes, webinars.

The user has to select which platform they are using currently. After that it will have an option to start screenshot. It will take a screenshot on pressing Tab key in the keyboard. The frontend is made using HTML5, CSS3, and JavaScript.

2.Backend:
The backend will save the screenshot in local storage. After that it will start the process of detecting text from the screenshot image. After text detection it will start extraction of text from the image.

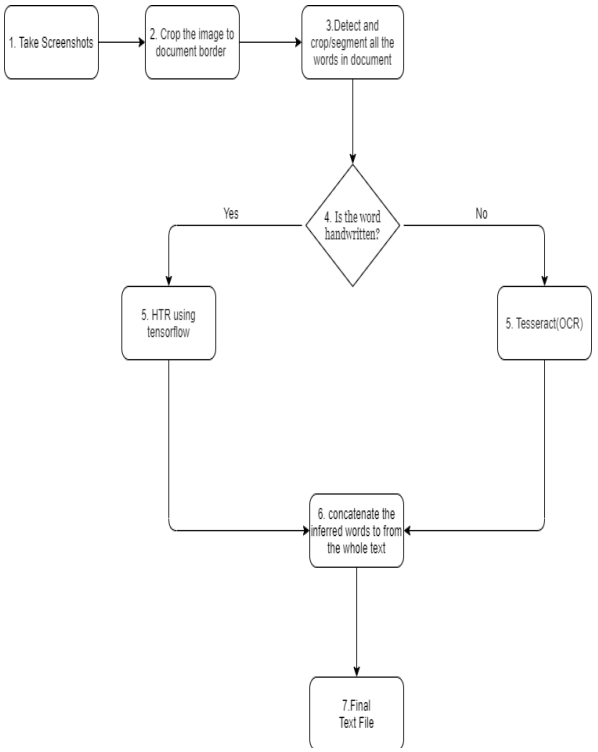

Fig 3.Flowchart

Once the text has been extracted it will create a separate document file from it. After this the final step will be destroying the screenshot image from the local storage. The backend is made using Python, Tesseract, JavaScript, and Flask.

3. Features:
- Taking screenshots from videos.
- Edit the screenshot.
- Creating editable notes document.
- Making documents available in all shareable formats.
- Making note making procedures easier with just one click.

V.CONCLUSIONS

The proposed system has a great potential to make the whole note making process fully automated and easier. This model solves the problem of note making while studying online or browsing educational videos. It saves a lot of time of students and makes their online studies less complex.

VI.FUTURE WORK

The future work for the proposed system can be to make it more accurate in low video quality resolution. To make audio to text option available as well in the application.

VII. LIMITATIONS

The proposed system may not be able to work in handwritten text. It might not be accurate when the text has complex background or low resolution quality.

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