

Video to Image Converter using DL precedence

Project by

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Proposed System

- The goal of our project is to create a program capable of figuring out the right time to take such screenshots of the video (keeping it to a minimum using a neural network).
- After choosing the set of images, further goals include analyzing the information, clustering the images, sorting data, etc. We will use AI tools such as character recognition, image recognition to help us in this task.

Literature Survey

[1] Apparatus and process for detecting scene breaks in a sequence of video frames

Ramin Zabih

<https://patents.google.com/patent/US5767922A/en?q=break&q=video&q=images&oq=break+video+to+images>

[2] Text Extraction from Video Images

Nidhin Raju

https://www.ripublication.com/ijaer17/ijaerv12n24_106.pdf

Project Methodology

- Frame splitting requires storing and calculating several types of data while processing the video, these include
 - a) the total number of frames in the video,
 - b) the total duration (in second)
 - c) the time per frame Extraction
- After detecting and catching the required frames, we will extract information present in those frames using OCR technology. Extracted information will be consolidated into a document. An extended part of the project can include identifying various clusters of data in the frame.
- Information Extraction
After catching the required frames, we will extract information present in it using OCR technology. Which will be consolidated into a single document.

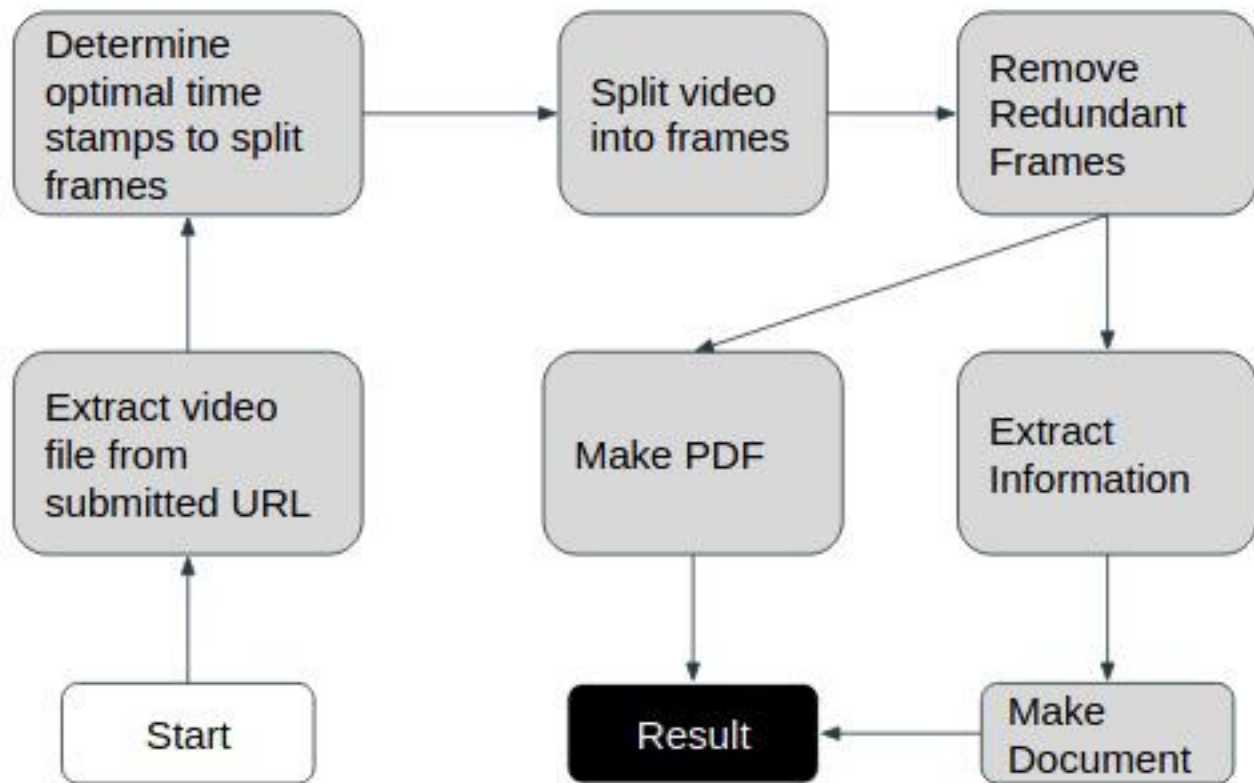
Abstract

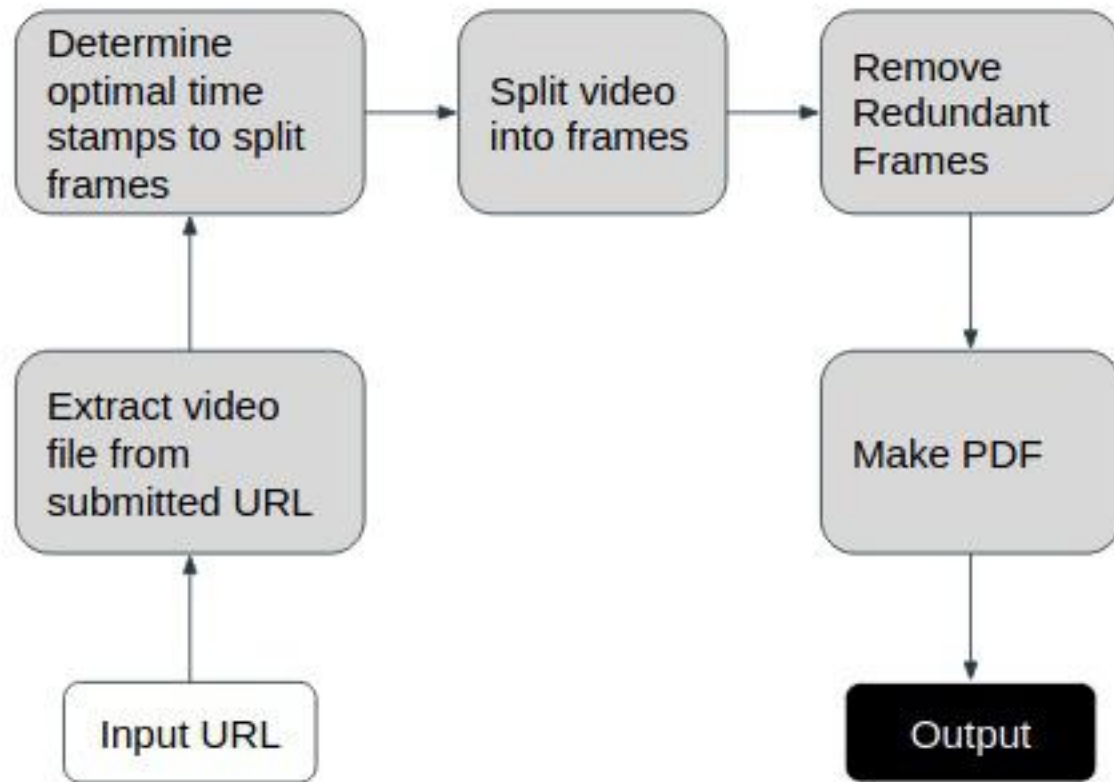
To create a set of software which analyzes a particular video and produces a set of images best summarizing the entire information in said video.

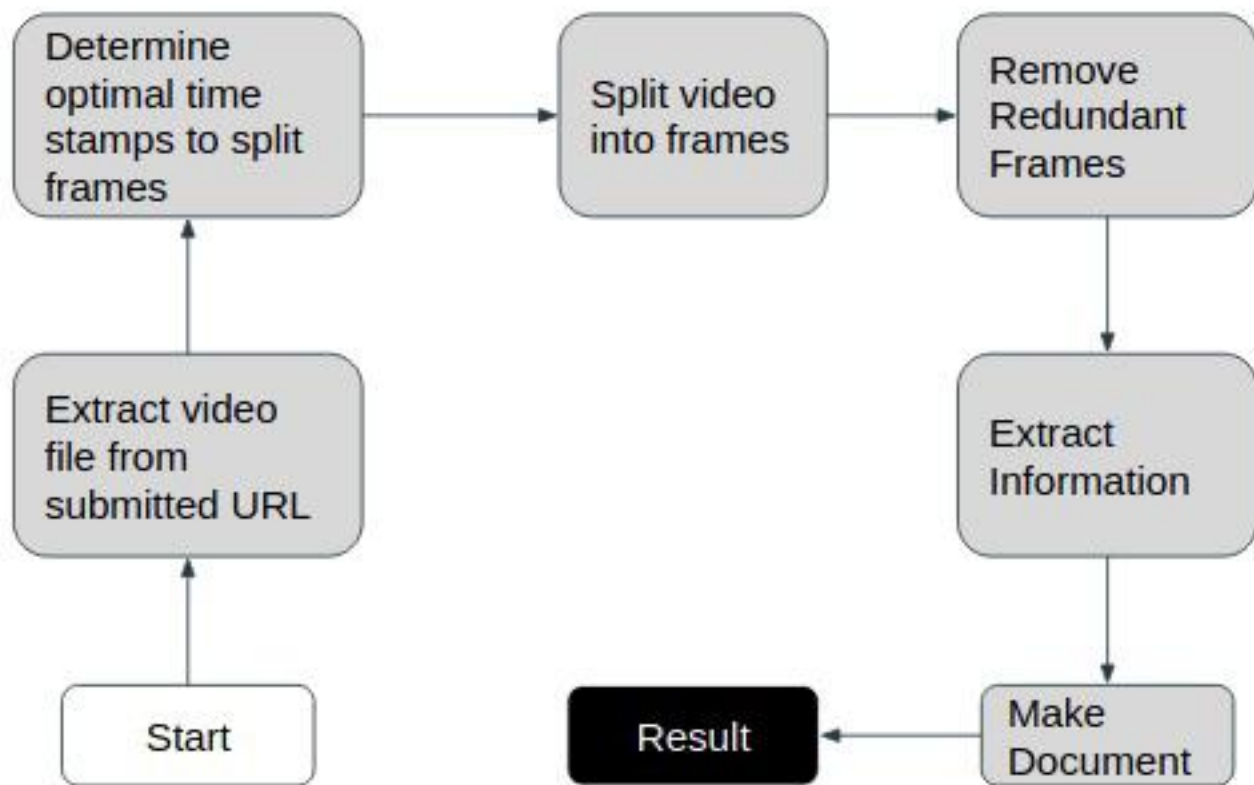
Problem Definition

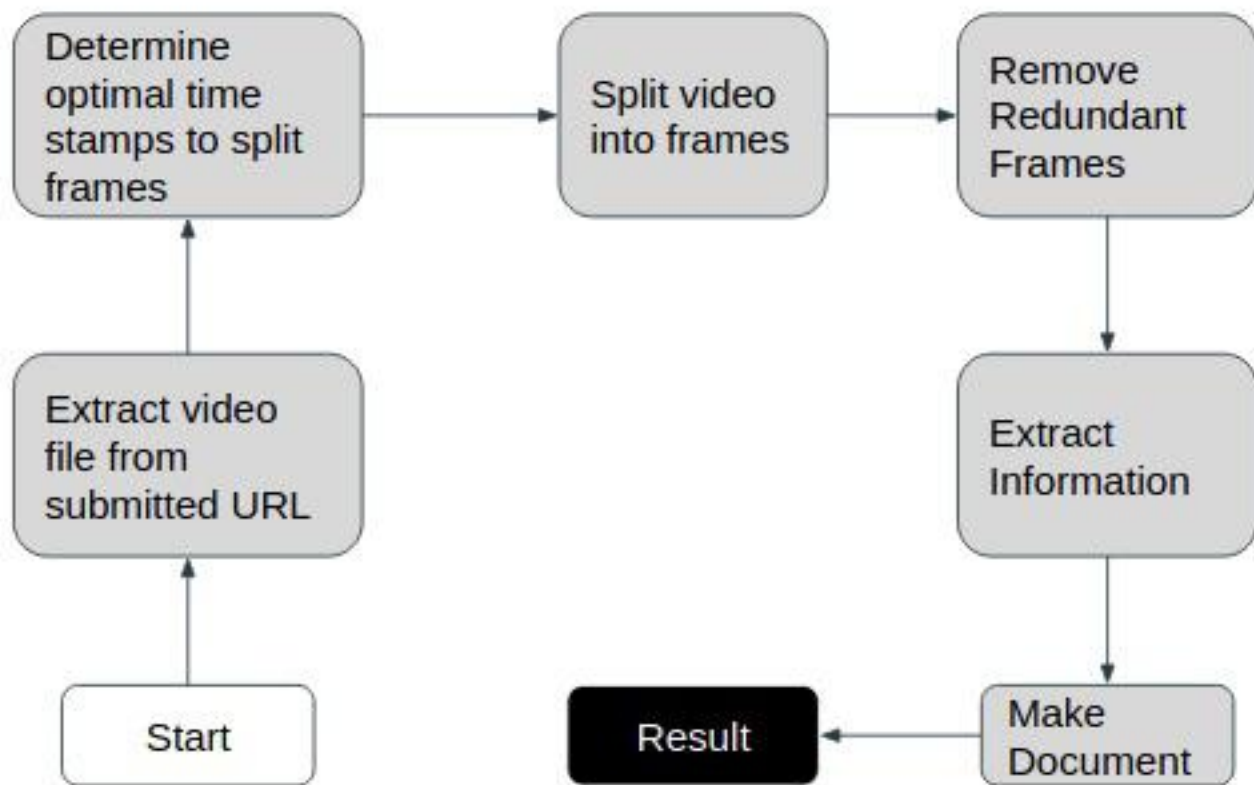
One of the problems faced by students watching educational videos is that, often the lecturers explain of a PPT which is not present in the description. Having access to such PPTs after viewing the video can help in summarizing the information learned.

System Design









References

[1]. Image Recognition and Image Processing Techniques

<https://medium.com/@Adoriasoft/image-recognition-and-image-processing-techniques-fe3d35d58919>

[2]. Real-time and video processing object detection using Tensorflow, OpenCV and Docker.

<https://towardsdatascience.com/real-time-and-video-processing-object-detection-using-tensorflow-opencv-and-docker-2be1694726e5>

Thank You

Existing System

There exist many projects for the purpose of image-to-text conversion as well as extracting information from videos, however a flawless end-to-end system isn't available. Also the major issue of appropriate frame detection is not covered.