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## Update READMEedu.md

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📄 **READMEedu.md** 2.88 KB

# OpenVINO for AiProc in Education

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## Instructions:

- login to your DevCloud machine and copy testFolder content from this repo into the HOME folder of DevCloud

- run the preprocess.sh script and check the console results log file date_Y_m_d.log

## Design

Preconditions:

1.

It is mandatory to place the input file with this name download_links_for_intel.csv the row header of the CSV file should have following format and column names

```
entryid name    parentDownloadUrl       childDownloadUrl
```

the home folder should contain the following empty tree structure before starting the script

```
mkdir -p ~/testFolder/raw_videos/work/
```
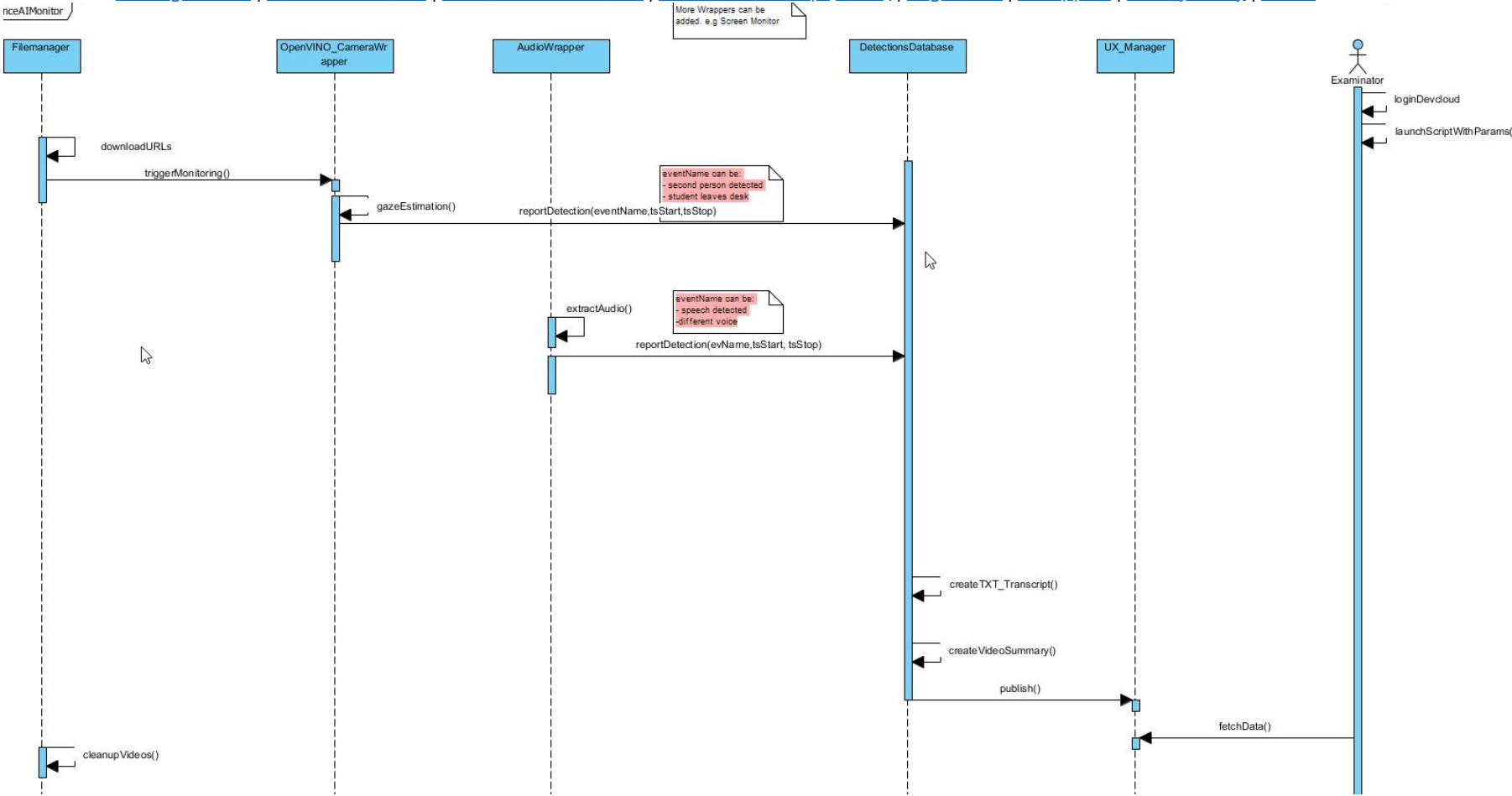
2.

In case not already installed on your machine/DevCloud, install the following Python3 packages:

pip3 install moviepy pip3 install numpy

pip3 install opencv-python

The script is started by running commands

```
cd ~/testFolder
./preprocess.sh
```

The high level design is summarized in

# Requirements and features

Only post processing required, not in run time. Input: one session / student / exam

Define Anomaly detection: Additional face in the camera human voice on the microphone Camera is off Microphone is off

Face recognition: Output expected to be smaller video or marking the timestamps in the video. Identify from video who is taking the exam (name of the person) What happens when we get an anomaly (an additional face

Voice recognition: Expected that there is no human noise. Any spoken word is flagged.

# Project components

- mp4 downloader
- movie editor ( label overlay using opencv + multi-clips stitching using moviepy)
- OpenVINO json file parser
- file infrastructure administration ( e.g. creation of separate folder with summary.mp4 and transcript.txt for each student name in the csv file). The scripts are generating the following output tree:

```
> output_videos
> ..Student name
> .....summary.mp4
> .....transcript.-txt
```

# Results

Copy all directories in a separate folder

```
u44194@s099-n018:~/testFolder/raw_videos$ mv dir_* outputsummary/
```

Archive all files with

```
tar -zcvf archiveSummaries.tar.gz outputsummary/
```

Sort all files with

```
du -ah ~/testFolder/raw_videos/outSummary/ | sort -rh | head -6
```

Expected output is:

```
Output is'''
u44194@s099-n018:~/testFolder/raw_videos/outSummary$ du -ah ~/testFolder/raw_videos/outSummary/ | sort -rh | head -6
1.3M    /home/u44194/testFolder/raw_videos/outSummary/
672K    /home/u44194/testFolder/raw_videos/outSummary/dir_SusanneBetrugsversuch.mp4
```

```
212K    /home/u44194/testFolder/raw_videos/outSummary/dir_Betrugsversuch1.mp4
212K    /home/u44194/testFolder/raw_videos/outSummary/dir_Betrugsversuch122.mp4
208K    /home/u44194/testFolder/raw_videos/outSummary/dir_Betrugsversuch2.mp4
```