Group A3 - Big Brother: Third Milestone

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TU Berlin

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Video training (eduVid)

Motivation & Overview

- Step 1: Summary of the issues of recorded classes in the form of indexes.
- Step 2: Informed learning.
- Step 3: Conveniently switch between specific topics on which the student wants to focus more or repeat.

Python modules

- OpenCV
- Tesseract
- The Natural Language Toolkit (NLTK)
- Rapid Automatic Keyword Extraction (RAKE)
- VLC

Pipeline process

- Script extraction
- Summarization
- Extraction of keywords
- Recognizing the change of presentation slides and recognizing the content on them using OCR
- If keyword from script = keyword from presentation index
- Access to relevant segments by demand
- Use a knowledge graph to make the program work more efficiently -(keywords are not always used when talking about a given topic)

Demo

We are going to demonstrate the following functionalities:

- video footage processing (from presentation till text)
- video player

Any Questions?