pdf2video sample presentation

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`https://github.com/tjunttila/pdf2video`

The tool

- `pdf2video` is a tool for producing videos from
  - a PDF presentation, and
  - a textual script.
- The script is narrated by the Amazon Polly text-to-speech service.
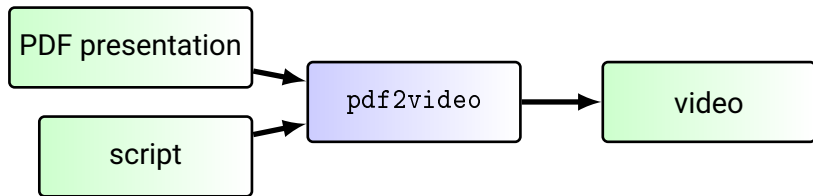- **Goal**: produce videos without audio recording and editing.
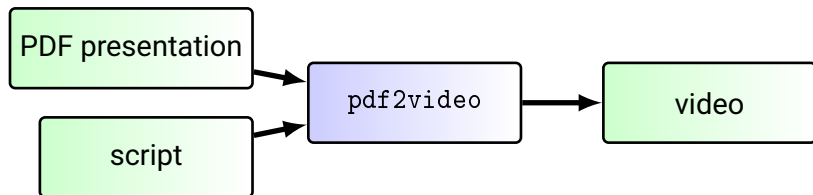
- External tools and services required:
  - Python version 3.6 or higher
  - `pdfinfo` and `pdftoppm`
  - `ffmpeg`
  - Amazon Web Services

Some pages can be omitted from the video...

Using the tool

- Basic usage:
  ```
  pdf2video presentation.pdf script.txt video.mp4
  ```

```
┌─────────────────────┐
│ PDF presentation    │──┐
└─────────────────────┘  │      ┌─────────────┐        ┌─────────────┐
                         ├─────▶│  pdf2video  │───────▶│    video    │
┌─────────────────────┐  │      └─────────────┘        └─────────────┘
│      script         │──┘
└─────────────────────┘
```

- PDF page selection and the narration voice can be customized
- This sample video is produced with:
  ```
  pdf2video sample.pdf sample.txt -pages "1,2,4-6" -voice
  Matthew -neural -conversational sample.mp4
  ```
- The sample PDF and script: see the github repository

The script file

- Textual format, easy to edit with any text editor
- `#page` header line starts the script for the next PDF page
- Reading style modifiers:
  - `*text*` reads `text` in an emphasized style
  - `@xyz@` spells `xyz` as characters
  - `#n` makes a break of length $n \times 100$ms
  - `#slow/text/` reads `text` in a slower rate
  - `#high/text/` reads `text` in a higher pitch
  - `#low/text/` reads `text` in a lower pitch
  - `#ph/w/p/` reads the word `w` with the X-SAMPA pronunciation `p`
- The delimiter "/" can be any other symbol

```
#page
Welcome to a short sample presentation about
the #sub#pdf-to-video#pdf2video# tool.
This video is produced automatically with the tool.
You can find more details in the GitHub page of the project.
#20
#page motivation
Need to make videos of your PDF presentations?
Tired in spending *hours* in recording and editing the audio tracks?
```

Subtitles

- Automaticlly generated from the script
- Can be tuned:
  #sub/*t*/*s*/ uses *s* in the subtitle instead of the spoken text *t*
- Can be combined with reading style modifiers
- Example:
  `#sub!big-#ph#θ#Ti:t@# of n squared!θ(n^2)!`

  Reads: "big-theta of n squared"

  Subtitle: "Θ(n^2)"