Labb C: RapportApp

Next meeting: 28e förmiddag
powerpoint:
https://docs.google.com/presentation/d/10fcL3TUL3xp6vQYUJMWa9sCl2anTVNReskt01IeEz4Y/edit?usp=sharing

Redovisningsdag:
12e dec (idé),
8e Jan (app)

Programing language: React

Target group: Tränare och indirekt spelare/utövare

API:

1. Speech-to-Text (STT): Converts audio to text (e.g., Google Cloud STT, AWS Transcribe, Whisper).
2. API Audio (microphone)
3. spela in skärm - apple **ReplayKit,** android **MediaProjection API**

Steg 1 :
- (Filma skärm)
- Rita på skärm (kunna välja en plan som fotboll, handboll osv att rita på)
- spela in ljud

Steg 2 :
- Ha en film
- kunna pausa och rita på bilden

Steg 3:
- skapa rapport (speech to text)
- med skärmbilder från “relevanta ” delar

Steg 4 :
- Pose estimation - *Apple CoMotion*
- Homography - Transformar filmer/bilder på spelplan
- ge relevanta värden i rapporten och i filmen(?) i ena hörnet
- olika typer av profiler (coach vs athlete, läkare vs patient)

Design
- Kunna ha olika profiler (personer) där filer samlas
- lägga in ny feedback
- kolla på tidigare filer

- sätta ut spelare på en plan

RapportApp/

```
├── node_modules/
├── public/
├── src/
│   ├── api/              // Hanterar all direkt kommunikation med externa API:er
│   │   ├── sttApi.js
│   │   ├── poseEstimationApi.js
│   │   └── filesApi.js
│   │
│   ├── assets/           // Bilder, CSS-filer, ikoner (t.ex. planen: fotboll, handboll, osv.)
│   │   ├── plans/
│   │   ├── icons/
│   │   └── styles/
│   │
│   ├── components/       // Återanvändbara, "dumma" UI-komponenter (View-delar)
│   │   ├── common/       // T.ex. Button, InputField, LoadingSpinner
│   │   └── drawing/      // T.ex. DrawingCanvas, PlanSelector
│   │
│   ├── features/         // Huvudkatalogen, organiserad efter appens funktionalitet (V-VM-M)
│   │   ├── analysis/     // Hanterar Steg 2, 3 & 4 (Video, STT, Pose)
│   │   │   ├── Model/
│   │   │   │   ├── AnalysisService.js  // (Anropar api/...)
│   │   │   │   └── ReportModel.js      // (Definierar rapportens struktur)
│   │   │   ├── ViewModel/
│   │   │   │   └── useAnalysisViewModel.js
│   │   │   └── View/
│   │   │       ├── VideoAnalyzerView.jsx
│   │   │       └── ReportGeneratorView.jsx
│   │   │
│   │   ├── capture/      // Hanterar Steg 1 (Filma, Ljud, Ritning)
│   │   │   ├── Model/
│   │   │   │   └── CaptureService.js
│   │   │   ├── ViewModel/
│   │   │   │   └── useCaptureViewModel.js
│   │   │   └── View/
│   │   │       └── CaptureScreen.jsx
│   │   │
│   │   └── userProfiles/  // Hanterar användare, inloggning, profiler (Coach/Athlete)
│   │       ├── Model/
│   │       │   └── UserService.js
│   │       ├── ViewModel/
│   │       │   └── useProfileViewModel.js
│   │       └── View/
│   │           └── ProfileSelectionView.jsx
│   │
│   ├── App.jsx           // Huvudkomponent, routing
```

```
│   └── index.js          // Appens ingångspunkt
└── package.json
```

Lab C

Seminar on December 12

(https://kth-se.zoom.us/j/67315162910)

Describe the purpose, target group, and selling point for your application. Also, describe what new APIs are used and the major features and parts of your solution. You have 5 minutes at your disposal for the presentation, so you need to be prepared. You also have to answer questions regarding your solution.

We recommend that you first present your idea (What? Target audience? Why is the app needed?), then outline the new APIs and possibly external data you will use. Finally, provide an overview of the intended architecture for the app (no details).

Note: Your presentation should include an image (last one) where you specify which tutorials, existing code examples, and similar sources you plan to build on. This is primarily information for the examiner, so it should not be a significant part of the presentation.

The seminar will be held on **December 12**, choose a timeslot and show up in person.

Please prepare a slide set (Powerpoint, Keynote, etc...) and prepare a short talk. We will use the 'Share Screen' feature of Zoom. Aim for 5 minutes.