

SE 492 - Report 05  
Decision Support in Racket Games  
Status Report 5

3/16/2020 - 4/2/2020  
Group Number: SDMay20-44  
Project Title: Decision Support in Racket Games  
Client: Simanta Mitra  
Faculty Advisor: Simanta Mitra

## Team Members

Benjamin Kramer  
Brian Guidarini  
Katelyn Sinn  
John Rachid  
Christian Barnes  
Aiden McMinimy

## Biweekly Summary

We got the application running on the server, so that it can be accessed anywhere assuming the user is on campus or using the network vpn. We also had more features implemented, such as video streaming on the front-end.

## Accomplishments

- Ben
  - Added video streaming to the front end application. This works by retrieving a video hosted on the Django server and serving it to the user using the Video-React library.
  - Expanded the video viewer to include time seeking such as skipping ten seconds ahead or going to a specific point in the video. While this works with some videos, large videos such as the ones on the Django server, may not work. More on this in the pending issues.
  - Setup the web application on our remote server, allowing it to be accessed from anywhere. Users can upload a video and view the videos they have already uploaded for that session.
  - Added environment variables to the React web app so that the application will automatically use the correct API host depending on the situation. This means that during development, the team can use the latest development version of the Django server locally, and when the app is deployed, it will use the remote Django server, all without requiring modification on the devs part.
- Brian

- Created a system to host videos on the Django service rather than needing to send entire video files back through an endpoint.
- Ported the backend to our server.
- Created a Mysql database for jobs. This will enable us to keep track of jobs even after the server restarts or is shutdown.
- John
  - Readded and updated code after it was lost in merge request
  - Added additional properties to timesplices so we can send more data to the front end.
  - Refactored parts of suggestion code
- Aiden
  - Merged my completed branch into the main branch and remerged main into the branch that's still being worked on
  - Added suggested return location to the recommended view
- Katie
  - Adjusted time splice data store to fit data, added mock data for now despite retrieving time splice endpoint data correctly.
  - You can view your uploaded videos in the side bar, selecting one will open the uploaded video to be viewed, and the time splice data can be seen if it is loaded
  - Video store adds a status field for when polling on processing status returns finished which can be used to add a spinner for retrieving time splice data.
- CB
  - Developed welcome page for the web app
  - Found a logo that fits our olympic-styled theme

## Pending Issues

- After working with video streaming on the frontend application, there appears to be an error where videos cannot have their current time changed i.e. skipping to a specific point, skipping ahead, skipping back, etc. This appears to be a problem with the Django server, and after some research, may have to do with the way the remote server is set up or the size of our videos. Compression is being considered but will require more research to be sure of the best way to go about this.
- Some videos throw errors on the Django server, even if they are very similar to other acceptable videos, preventing users from being able to upload and view different videos. The exact cause is not known, but the stack trace indicates it might have something to do with the court identification.

## Time

Team Member	Bi-Weekly Hours	Total Hours
Benjamin Kramer	18	74
Katelyn Sinn	16	60

Brian Guidarini	16	85
Christion Barnes	16	60
John Rachid	14	67
Aiden McMinimy	16	58

## Upcoming Tasks

- Ben
  - Work with Brian to figure out the video seek problems.
  - Create build scripts for the remote server to make deployment of the Django server and the React app easier. Currently it all must be done manually by ssh-ing into the server.
- Katie
  - Add spinner for when time splices are not ready yet because video is not done processing
  - Make some stuff pretty
  - Add dropdown with time splice data for timeframe, selecting one will view the recommendation data at that time.
- John
  - Help where it is needed.
  - Continue working with Aiden to ensure the front end has everything they need
  - Apply polish to python processing
- Brian
  - Work with Ben to figure out the video seek problems.
  - Make jobs more versatile by storing them on a database
- Aiden
  - Finish the recommended view so that it uses real data and updates with the time splices as inputs
  - Help with setting up to view the data returned in the time splices
- CB
  - Develop a login page for the web app that allows users to have their own profile
  - Make app a little more pretty (experiment with different themes)

## Advisor Meeting Summary

We met with Dr. Mitra and discussed the future of our application. This included what our priorities are in this last month of school, how he can better give us feedback going forward, and general advice in setting up the server and database. We told him we would have a usable application being hosted on the server by Monday, March 30th, and we accomplished this.