SE 492 - Weekly Report 02
Decision Support in Racket Games
Status Report 2

2/1 - 2/13
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
Christion Barnes
Aiden McMinimy

Biweekly Summary

Within these past two weeks, a solid basis for the Rest API was created. The front end was also built up. There is now a means to package information from a video so that it can be converted to JSON. The project's timeline was made clearer by the use of Trello to plan out the next iteration.

Accomplishments

- Ben
    - Brainstormed with Brian and John to come up with a way to track the ball better so that the end of rallies could be found more easily. Ultimately, it was determined that the current system was good enough, however, theoretical methods that may improve accuracy in the future were noted.
    - Added a way to package the information gathered in the program into a list that can be easily converted into JSON. This will be very useful for sending information about videos to the front of our application.
    - Worked with the team to find tasks and deadlines for major portions of our project.
- Brian
    - Setup Django and set up its architecture within the project. It serves as the foundation for our communication with our front-end.
    - Created an endpoint to upload a video, retrieve a video, and put new users in the database. These are the fundamental endpoints our Rest API needs before the tools needed to provide all necessary services to the front-end are implemented.

    - Started connecting the Rest controller to the Python processing. The end result will be the input video being processed and associated with a JSON file that contains feedback/metadata about the video
- John
    - Worked with the team in order to set up tasks and break up the minimum viable product into distinct tasks.
    - Worked with brian to setup Django. Also created multiple endpoints in Django. This is how the information will be transferred between our backend and front end.
    - Brainstormed with Ben on better ways to figure out if a person hit the birdie.
    - Started work on hit detection
- Aiden
    - Spent time learning how to write with ReactJS
    - Started creating the header and recommended view for the ReactJS frontend
- Katie
    - Experimented with different frameworks, dart and then reactjs, settled on reactjs with material-ui components and redux. Set up upload video functionality.
- CB
    - Began learning and experimenting in ReactJS
    - Found different ways to implement a loading screen within ReactJS
    - Began developing a loading screen
- All
    - Worked together to break up tasks for the next two week cycle of work. A hard deadline was set as February 22nd, and if successful, the minimum viable product of our project should be completed. This MVP will act as a useful skeleton for the rest of the project to build on.

Pending Issues

- Optimization is needed for the Python image processing

Time

Team Member	Bi-Weekly Hours	Total Hours
Benjamin Kramer	7 (per week, 14 total)	28
Katelyn Sinn	7 (per week, 14 total)	17
Brian Guidarini	8 (per week, 16 total)	26
Christion Barnes	6 (per week, 12 total)	14
John Rachid	7 ½ (per week, 15 total)	23
Aiden McMinimy	6 (per week, 12 total)	16

Upcoming Tasks

- Ben
    - Optimize image processing. Currently, our algorithms perform multiple redundant steps since different aspects of our image processing was done isolated from other parts. My job is to make our application more efficient by fixing some of these obvious unnecessary steps.
    - Assist John a Brian with some of the logic in the Python application like how to find certain time splices and how to connect the processing with the controllers.
- Katie
    - Connect frontend-backend connection for upload video, investigate libraries that do fancy video stuff on webpage
- John
    - Finish hit detection
- Brian
    - Continue connecting the Python video processing to the Rest API. The video from the Rest API is still not being processed and returned.
    - Help Katie use the Rest API in order to communicate with the backend from the front-end.
    - Work with Ben in order to speed up image processing. This can be done by removing some redundancies in our code.
- Aiden
    - Finish creating the Header and Recommended View
    - Finish implementing the Recommended View using mock data
- CB
    - Finish and test video loading screen
- All
    - Complete the current iteration which focuses on the minimum viable product.
    - Coordinate with our client, Dr. mitra, in order to ensure the iteration complies to his requirements.

Advisor Meeting Summary

The team touched base with Dr. Mitra to check if the team was on the right track. Plans for the iteration were shown, and other than some minor issues, Dr. Mitra approved of it. The team ensured the backend was being implemented how Dr. Mitra wanted it. Lastly, Dr. Mitra gave some suggestions for the project's architecture as the team moves forward.