EE / CprE / SE 492 – sddec18-12

360 Webcams for Zoos and Aquariums

Week 08-09 Report: 2018.10.09 - 2018.10.22

General Information

Client: True 360 (Christopher James)

Faculty Advisor: Dr. Henry Duwe

Team Members:

Name	Primary Role	Secondary Role(s)
Nathan Cool	Front-End Engineer	Project Manager, Webmaster
Zach Newton	Front-End Engineer	Scrum Master, QA
Ian Jamieson	Machine Learning	Graphics Lead
Alan Negrete	Front-End/Back-End	Scribe, QA
Tarek (TJ) Yacoub	Embedded Engineer/SRE	Communication Lead, QA
Hosam (Sam) Abdeltawab	Embedded Engineer	Software Architect

Weekly Summary

Over the past two weeks, our team worked to get the minimum viable product up and running. This includes connecting a (mock, yet completely interchangeable) camera to our microservices architecture, recording a video clip, storing it, and being able to interact with it in the front end web application.

Past Week Accomplishments

Nathan: Brushed up on some React/Redux concepts and worked on the front-end filtering/searching for videos (archives feature). Also continued working on project documentation (design document v2).

Zach: Worked with Alan to complete integration of front-end with backend in order to demo the connected system to Dr. Duwe; specifically, implemented UI and communication surrounding camera controls. Communicated new front-end data needs to the backend team for video information storage and usage.

Ian: Retrained the model with small dataset and realized that it wasn't enough data. Went to collect more video footage to better train the model. Continued development of model and algorithm for selecting video clips.

Alan: Completed the integration on the frontend with the communication service to display the archived footage from S3. Completed the invite & registration system for new users, the invitation generates an entry and dispatches an email with a registration link (with code applied) to the invited user.

TJ: Completed the integration with other services. We are currently able to register a camera, start, stop the stream, and terminate the embedded process.

Sam: We completed the integration of the embedded side with the AWS services.

Recent Group/Client/Advisor Meetings

Date, Time, Location	Participants	Details
2018.10.09, 15:00 - 16:00, Atanasoff 223	Team + Advisor	General meeting
2018.10.11, 14:00 - 15:00, Atanasoff 213	Team	General meeting
2018.10.16, 15:00 - 16:00, Atanasoff 223	Team + Advisor	General meeting
2018.10.18, 14:00 - 15:00, Atanasoff 213	Team	General meeting

Pending Issues

Nathan: N/A

Zach: N/A

Ian: N/A

Alan: N/A

TJ: N/A

Sam: N/A

Individual Contributions

Name	Individual	Hours This Week	Total Hours

	Contributions		
Nathan Cool		20	65
Zach Newton		17	62
Ian Jamieson	SEE PAST WEEK ACCOMPLISHMENTS	20	65
Alan Negrete		25	73
Tarek (TJ) Yacoub		20	80
Hosam (Sam) Abdeltawab		20	66

Upcoming Plans

Nathan: Continue working on the search/filtering feature, as well as additional front-end tasks and project documentation.

Zach: Utilize authentication systems to cordone parts of the application on the client side. UI cleanup here and there.

Ian: Work on retraining the model and hopefully start selecting clips.

Alan: We now have the minimum viable product with all the services integrated. Next, we'll continue expanding on the front-end to fully utilize our services.

TJ: Incorporate a mechanism to show the streaming status of a camera.

Sam: Working with TJ on the incorporation of the streaming status.