

EE / CprE / SE 491 – sddec18-12

360 Webcams for Zoos and Aquariums

Week 05 Report: 2018.02.18 - 2018.02.24

General Information

Client: True 360 (Christopher James)

Faculty Advisor: Dr. Henry Duwe

Team Members:

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

Weekly Summary

Over the past week, our team broke into our previously determined sub-teams in order to further investigate our respective technical areas and begin working on our initial implementation. Front-end focused on looking into wireframing/mockup methods, as well as continuing to create boilerplate code. Backend focused on looking into a database structure, setting it up, and creating some initial documentation. Embedded focused on refining previously created camera control code and converting it from JavaScript to Java.

Past Week Accomplishments

Nathan:

- Look for a good mock-up creation tool
- Create initial mockups for the user interface
- Research React/Redux/Sass tools, which will be used for implementing our web app

Zach:

- Implement React Boilerplate

- Research redux implementation best practices
- Share front-end stack learning resources with Nathaniel

Ian:

- Worked with Alan on initial design of database for web app
- Built initial design of database for web app
- Research authentication issues of storing data

Alan:

- Worked with Ian on initial database design
- Set up completed for Node JS & pull request on gitlab
- Set up for API documentation

TJ:

- Created a Java application that will handle the youtube workflow of creating a live event
- Created a Java application that will handle the transcoding workflow from RTSP to RTMP.

Sam:

- Read the Rico Theta’s API in order to see how it would stream through cable and not only wifi.
- Learned PHP for a better Database understanding.

Recent Group/Client/Advisor Meetings

<u>Date, Time, Location</u>	<u>Participants</u>	<u>Details</u>
2018.02.19, 13:15 - 14:45, Atanasoff 223	Group + Client + Advisor	General meeting; coordinated with our sub-teams in order to break down technical tasks.
2018.02.22, 15:30 -16:30, Coover 3138	Group	General meeting; progress updates with respect to working on sub-team tasks.

Pending Issues

Nathan: Balsamiq mockup generation tool is not free — potentially looking into using Lucidchart OR hand-drawn mockups.

Zach: Implement Redux! Or maybe think about not using redux if it starts to get too crazy.

Ian: Still working on authentication aspect of the database. Working on how to deal with sensitive user information.

Alan: Authentication decision, leaning towards Firebase.

TJ: N\A

Sam:

- Working with TJ to fix the buffer time issue with the garmin.

Individual Contributions

<u>Name</u>	<u>Individual Contributions</u>	<u>Hours This Week</u>	<u>Total Hours</u>
Nathan Cool	SEE PAST WEEK ACCOMPLISHMENTS	5	60
Zach Newton		6	36
Ian Jamieson		6	47
Alan Negrete		12	49
Tarek (TJ) Yacoub		6	52
Hosam (Sam) Abdeltawab		8	47

Upcoming Plans

Nathan: Continue working with Zach on mocking up and implementing a front-end skeleton solution.

Zach: Continue work on implementing the front-end skeleton. Start implementing semi-functional UI that matches mocks as they come in.

Ian: Continue work on the database and authentication of sensitive user information.

Alan: Continue expanding on API, backend authentication & API docs.

TJ: The application requires some manual steps to complete the streaming process that I need to implement in the code.

Sam:

- Research a cheap cloud platform for saving our video streams.
- Research a way to live stream from the camera instead of recording and then streaming.
- See if there are any more languages I need to explore in order to better benefit the project.

