EE / CprE / SE 491 – sddec18-12

360 Webcams for Zoos and Aquariums

Week 06 Report: 2018.02.25 - 2018.03.03

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	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 focused on completing version 1.0.0 of our project design document. Additionally, we worked through more setup processes in order to continue implementing our embedded, back-end, and front-end components.

Past Week Accomplishments

Nathan: Worked on refining and finalizing our design document (version 1.0.0). Also continued learning JavaScript and researching React + Redux while reviewing Zach's React App skeleton code.

Zach: Finished the React App skeleton and implemented Redux in the React App skeleton.

Ian: Worked on getting backend software setup and installed on my computer.

Alan: Setting up Firebase Admin for authentication & securing the backend.

TJ: Setup up FFmpeg and the associated dependencies on the Raspberry Pi.

Sam: Worked on setting up FFmpeg and setting the dependencies with TJ.

Recent Group/Client/Advisor Meetings

Date, Time, Location	Participants	Details
2018.02.26, 13:15 - 14:45, Atanasoff 223	Group + Client + Advisor	General meeting + discussion about breaking into sub-teams to focus on component development
2018.03.01, 15:30 - 16:30, Coover 3138	Group	General meeting + design document discussion
2018.03.03, 09:00 - 12:00, Arcadia Cafe	Group	Group design document work time

Pending Issues

Group: We need to figure out APIs for each of our project components in order for them to be able to communicate/interact with one another.

Nathan: Still trying to understand React and Redux in the scope of Zach's skeleton code. Zach and I need to collaborate in order to provide our client with a tangible front-end component which provides mock archive viewing functionality.

Zach: We need to build something that the client can interact with to be able to tangibly show our progress. This will be in the form of a Mock Video Archive viewer on Thursday, March 8th. Nathan and I need to meet up to pair program to share knowledge about front end architecture and product ideations.

Ian: Still having a few issues with getting the software installed on my computer and getting the programs up and running.

Alan: We need to secure the API. We also have to figure out a way to bring all the different pieces together. Then sure we can plan things accordingly to get the security features up together on the front end and the back end.

TJ: The Raspberry Pi is not able to find the connected Ricoh Theta V. The error is /dev/video0 file does not exists.

Sam: Raspberry Pi can't locate the usb connected camera.

Individual Contributions

Name	Individual Contributions	Hours This Week	Total Hours
Nathan Cool	SEE PAST WEEK ACCOMPLISHMENTS	7	67
Zach Newton		8	44
Ian Jamieson		3	50
Alan Negrete		3	52
Tarek (TJ) Yacoub		3	55
Hosam (Sam) Abdeltawab		4	51

Upcoming Plans

Nathan: Meet with Zach in order to ensure we are on the same page with regards to the front-end architecture and the state of the skeleton code implementation. We will also work to implement a mock archive video viewer so our client can interact with a tangible UI component.

Zach: Meet up with Nathan on Wednesday afternoon to sync on front-end architecture. After sync, we will implement a bare bones Mock Archive Video viewer. The styles will be black and white, simplistic, in order to avoid spending too much time on easily changeable, non-functional design aspects.

Ian: Hopefully be able to get backend software up and running on my computer so I can help with development.

Alan: Actually implement the Firebase Admin.

TJ: Test the stream quality on the Raspberry Pi, as well as check if there will be any issues from saving footage on a local machine.

Sam: Work on figuring out how to detect the usb connected camera to the Raspberry Pi without errors.