**CSE 216 Project Manager Report: Phase 4, Team**

List your team members, providing name, email, and role for this project. Also provide the URL where your live Heroku-hosted web front-end can be found.

Jake Schinto – [jjs220@lehigh.edu](mailto:jjs220@lehigh.edu) - Project Manager

Abi Betancourt – [adb420@lehigh.edu](mailto:adb420@lehigh.edu) - Android

Chris Doms – [cid219@lehigh.edu](mailto:cid219@lehigh.edu) - Front End

Sydney Becker – [shb220@lehigh.edu](mailto:shb220@lehigh.edu) - Backend

Thomas Salemy – [tps220@lehigh.edu](mailto:tps220@lehigh.edu) - Admin

Heroku - <https://limitless-basin-82865.herokuapp.com/>

**Back-End Server**

Describe the mechanism you are using to interact with Google Drive. Are you using an existing library? Are you using a REST API? Are you using some other mechanism? Were you able to get the service account to work correctly?

*We managed to get the service account up and running with the Google Drive and planned to use google libraries and documentation in order to get the Google Drive interaction working in the backend. The plan ultimately was to use the preset google apis to send and receive files.*

Explain how you are using memcachier to cache documents.

*We used rubyeye/Google memcachier documentation to try and set up a Memory Cache on a server to store these documents. Ideally the documents would be stored into the cache and uploaded to the server.*

Is the back-end code appropriately organized into files / classes / packages?

*The structure of the project is unchanged, so the code is appropriately organized into files, classes, and packages.*

Are the dependencies in the pom.xml file appropriate? Were there any unexpected dependencies added to the program?

*The dependencies added were needed for google drive apis and setting up a memcache, so I believe they are necessary.*

What was the biggest issue that came up in code review of the back-end server?

*The biggest issue is that the google drive and memcachier were unsuccessful in being implemented, so the needed actions cannot be made.*

Describe any refactoring that was performed to reduce technical debt from the last phase.

*Code formatting and general readability was improved over the backend code.*

**Web Front-End**

Describe your solution for file upload.

*We are using the Google Drive Api to upload files from our website.*

Describe your solution for accessing images, documents, and links.

*Images and Documents are retrieved from the google drive and would be displayed within the body of a message.*

Is the web front-end appropriately organized into files / classes / packages?

*Yes, the front-end structure and organization seems sound for what has been pushed in the past.*

Are the dependencies in the package.json file appropriate? Were there any unexpected dependencies added to the program?

*The dependencies are in relation to new google api usage so they are definitely appropriate given what was required.*

What was the biggest issue that came up in code review of the web front-end?

*The code couldn’t be adequately tested because not everything was implemented fully and could not be tested in conjunction with the other branches.*

What technical debt do you see in the current web front-end implementation?

*If we want support for these new features we will need to go back and finish up the rest of the implementation.*

**Android App**

Which approach to the Camera API did you use, and how well did it work?

*We looked into doing an approach similar to snapchat on android devices using a camera intent and screenshotting the camera app.*

Describe your solution for accessing images, documents, and links.

*Our solution was to use the google drive api to retrieve the documents from the saved drive.*

Is the android app appropriately organized into files / classes / packages?

*None of the structure was altered from the changes made during this sprint so the files are organized just fine.*

Are the dependencies in the build.gradle file appropriate? Were there any unexpected dependencies added to the program?

*Dependencies were added to access the camera and to interact with the google drive. None of these dependencies are unexpected considering what needed to be done.*

What was the biggest issue that came up in code review of the android app?

*The biggest issue is that it was hard to test that everything was working correctly because the other aspects were unable to be implemented with*

What technical debt do you see in the current android app implementation?

*We will need to implement the google drive api in order to have the code working.*

**The Admin App**

Describe your solution for upgrading the command-line interface for administrative tasks.

*We wanted to keep the past data preserved so we chose to keep any changes we made small so that they could be easily fixed if an error were to occur.*

Describe your policy for deciding when to delete files.

*We decided to respect a quota system and would simply keep files based on that quota and deleting oldest files first to stay within that quota.*

What was the biggest issue that came up in code review of the admin app.

*Since the other sections were unable to get the data successfully working it’s a little hard to test how to manipulate data as the admin position*

What other roles did the admin developer play in helping the project to move forward toward completion?

*They helped set up some of the api work as well as come up with the strategies to achieve the necessary goal.*

**Project-Wide**

Were there any team issues that arose?

*Yes, teammates seemed to struggle with the concepts required in this phase and seemed to quickly run out of time for figuring it all out and implementing*

How did the amount of time your teammates spent compare to the amount of time you thought the tasks would take?

*This phase seemed significantly harder than all of the previous phases thus far, so I think that my teammates did put in a lot of time to try and make sense of it all but were unfortunately discouraged by the large task.*

Describe the most significant obstacle or difficulty your team faced.

*Figuring out how to connect with the external storage of google drive, and not having the other branches completely working to help figure out their own.*

What is your biggest concern as you think ahead to the next phase of the project?

*We are nearing the end, so I don’t see any setbacks from this phase ultimately affecting the end goal. Will will just need to decide if it’s worth re-implementing or just scraping*

What are the features to be implemented in Phase 5.

*We would like to keep things related to our roots and main topic behind the app, the Zoo. To achieve this, I thought it’d be fun to implement some sort of educational api in relation to animals! Or to implement sounds to go along with the site.*

Submit documentation for the user interface for the apps.

