

EE / CPR E/ SE 491 - Bi-Weekly Report #1

*Dates:* 8/17/2020 - 8/31/2020

*Group Number:* sddec20-13

*Project Title:* My (Musical) Life

*Client & Advisor:* Dr. Henry Duwe

*Team Members:*

Christian Hernandez - Project Manager

Chaz Clark - iOS Developer

Daksh Goel - Backend Developer

Vatsal Bhatt - Backend Developer

Vignesh Krishnan - Frontend Developer

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### **Weekly Summary**

As for the team's weekly summary, the team has been meeting quite frequently throughout the past couple of weeks. The team is planning on continuing to do this throughout the semester. We want to make sure that we are making progress throughout the semester as it has been shortened.

Additionally, the team began its initial stages of development. This involved setting up the lambda functions for the backend and setting up the front-end. The team plans on giving Dr. Duwe a presentation of our progress each week. We want to provide him a demo of the app each week.

Next week, the team plans on building off of its initial development. This includes building out the UI and continue to work with setting up the lambda functions for the backend.

### **Past Week Accomplishments**

- Christian
  - Began to research testing for iOS applications
    - Reviewed TestFlight. This platform only seems as if it can be used only when the app is ready to released for the first time. It doesn't seem as if we can use this until the very end [1].
    - Based on initial research, Appium seems to be the front runner. Appium seems to have been getting lots of nice reviews. Additionally, Appium is free.
    - XCTest Framework
      - Christian found a nice tutorial to follow for XCtests
        - <https://www.raywenderlich.com/960290-ios-unit-testing-and-ui-testing-tutorial>
      - Christian will be able to use XCode's test navigator [3].
  - With Chaz's help, the team began to create new cards in GitLab Project Management board
    - *Testing and Review Website* were added.
    - Additional cards were moved around.
  - I also made some small edits to our team webpage
- Chaz

- Initialized storyboard set up for our Xcode Project
- Created ViewControllers to programmatically add functionality to our user interface
- Fixed conflict with git and directory structure for project
- Created User Database model for iOS Client
- Daksh
  - Created database using AWS RDS service
  - Created Lambda functions to handle user-login
  - Began using secrets to hide database credentials
- Vignesh
  - Helped setup secrets manager in AWS to store RDS credentials
  - Worked with authentication lambda to test out secrets
  - Helped begin git workflow
- Vatsal
  - Helped setup secrets manager in AWS to store RDS credentials
  - Researched into Spotify music metadata and python integration
  - Debugged lambda functions to fix issues with hiding RDS credentials

### **Pending Issues**

There are currently no pending issues.

## Individual Contributions

<b>NAME</b>	<b>INDIVIDUAL CONTRIBUTIONS</b>	<b>HOURS THIS WEEK</b>	<b>HOURS CUMULATIVE</b>
Christian Hernandez	<ol style="list-style-type: none"><li>1. Testing research</li><li>2. Began to practicing testing the app</li><li>3. Updating project board</li><li>4. Updating team website</li></ol>	6	13
Chaz Clark	<ol style="list-style-type: none"><li>1. Created UserDB Client model</li><li>2. Created Initial Login View</li><li>3. Resolved git project structure</li></ol>	6	12
Daksh Goel	<ol style="list-style-type: none"><li>1. Created database</li><li>2. Created lambda function for user-login</li><li>3. Began using Secrets Manager</li></ol>	6	12
Vatsal Bhatt	<ol style="list-style-type: none"><li>1. AWS Secrets Manager</li><li>2. Debugged lambda functions</li><li>3. Researched into Spotify's music metadata</li></ol>	6	12
Vignesh Krishnan	<ol style="list-style-type: none"><li>1. AWS Secrets manager</li><li>2. Git setup</li></ol>	6	12

## **Comments and extended discussions (Optional)**

N/A

## **Plans for the Upcoming Week**

- Christian
  - Continue with developing a robust test design to test our app.
    - Continue to do more research on iOS testing frameworks and platforms
  - Plan on the development of our app. For example, start establishing checkpoints and deadlines.
  - Continue to assist my teammates with front-end and back-end development.
    - Finish the home page design for the app
- Chaz
  - Integrate third party API Frameworks into the iOS codebase
  - Continue to build out UserClient Model
  - Start on network calls to AWS backend
- Daksh
  - Continue to build out Lambda functions
  - Finish implementing Secrets Manager to ensure security of credentials
  - Begin to finalize data models
- Vatsal
  - Continue working on and debugging lambda functions in AWS
  - Have database connection setup to be used with the login screen

- Start initial prototyping with spotify's music metadata to be used in the recommendation algorithm
- Vignesh
  - Finish figuring out how to use secrets manager in lambda
  - Connect UI button to trigger authentication

### **Summary of Weekly Advisor Meeting**

Our meeting with Dr. Duwe went well. We met with him for the first time since May on 8/27. This meeting involved catching up with Dr. Duwe with the current state of the project. Additionally, the meeting involved the expectations for the team for the semester. For this semester, Dr. Duwe would like to see progress on the app each week. Last semester, the meetings mostly consisted of discussing our design with Dr. Duwe. This semester, we will mostly focus on implementation during our meetings.

In addition, we talked about the impact that Covid-19 has on our project. Testing our app may be difficult given that we cannot go to local gyms, libraries, classrooms, meetings, etc. as much as we were used to. The "stay at home" order impacts our testing quite a bit. Therefore, Dr. Duwe has recommended that we use synthetic data to test our app. He also wants us to make sure to update our design document with any difficulties we deal the team has with the development of the project.

## References

- [1] D. Mathews, “Steps to put your app on TestFlight,” *Medium*, 31-Aug-2016. [Online]. Available: <https://medium.com/@dmathewws/steps-to-put-your-app-on-testflight-and-then-the-ios-app-store-10a7996411b1>. [Accessed: 30-Aug-2020].
- [2] L. Crespo, “Best Automated Testing Tools for iOS,” Bugfender, 22-Jul-2020. [Online]. Available: <https://bugfender.com/blog/best-automated-testing-tools-ios/>. [Accessed: 30-Aug-2020].
- [3] M. Katz, “iOS Unit Testing and UI Testing Tutorial,” raywenderlich.com. [Online]. Available: <https://www.raywenderlich.com/960290-ios-unit-testing-and-ui-testing-tutorial>. [Accessed: 30-Aug-2020].