**CSE 216 Project Manager Report: Phase 5, 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. Email your team’s developer manual to both the professor and your team’s mentor.

Zehui Xiao (zex220@lehigh.edu): Back-end Developer

Yuming Tian (yut222@lehigh.edu): Android Developer

Xingchen Liu (xil321@lehigh.edu): Admin App Developer

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Letong Zhang (lez221@lehigh.edu): Project Manager

URL:<https://arcane-refuge-67249.herokuapp.com/>

**General Questions**

Describe the overall approach that your team took. Are you repurposing The Buzz for a new domain? Cleaning and refactoring to make the most effective The Buzz possible? Something else?

We add in a more convenient login method so user can switch between using web and android.

Discuss the external API that you chose to use in this phase of the project. Is it relevent to the back end, the front ends, or both?

We used Barcode Decoder API, which is used for decoding QR Code. Our Web generate QR code with info needed to login on Android, and Android use Barcode Decoder API to get info in the QR Code to login. Our backend did not use any additional API, but everytime a QR Code is generated, we will store the timestamp into the new table tblQR, to help calculate how many times a user generate QR.

Describe how your team produced the developer manual.

Web, Android and Backend categorized what they did and helped PM to write the developer manual.

**Back-End Server**

Describe the changes you made to the back end in this phase of the project.

Added post /generateQR route to store the time frontend generate the QR code into tblQR; added post /suggestion route using ticket master api

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

yes

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

yes

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

git branching backend code to frontend for deploy and testing

What technical debt do you see in the current back-end server implementation?

/suggestion route isn't fully implemented with frontend

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

No technical debt from last phase

**Web Front-End**

Describe the changes you made to the web front end in this phase of the project

I created a pop up window to display user information such as uid, uemail, and session-key. After user login, the QR code will be given to them for instant android login.

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

Yes.

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

Yes. All are necessary implementations for functions.

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

Due to version conflict, methods such as “require” cannot be recognized by typescript.

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

No technical debt

**Android App**

Describe the changes you made to the android app in this phase of the project

Added scan qr code function. Now android is able to scan qr code generated by web to login instead of using google sign in.

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

Yes

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

Yes (No unexpected dependencies added)

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

Too many activities and the code are complicated.

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

Potential Google login issue. Failed Code 10 may happen when running Android on different machines.

**The Admin App**

How did your admin app change in order to support the new requirements in this phase of the project?

Add tblQR table, which contain three attributes: qid, uid, qdate. When user requires for a QR code, add a row to the tblQR table.

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

Lend the laptop to Android for development. Help with web role to understand the typescript. Communicate with backend role to design the SQL statement.

**Project-Wide**

Were there any team issues that arose?

In our planning, Front-End would do most work. To fix this, we worked together and helped each other out.

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

Since we planned big at first (planning details in the next question), our estimate time was much longer. When we decided to focus on one of our ideas, it took less time.

Describe the most significant obstacle or difficulty your team faced.

We planned to add the QR Code scanning function, Ticketmaster API and Google Calendar API into our app. We had some basic set up for these functionality, but we later realized the workload and decided to focus on the QR code function.