

## **Know-Nothings**

Todd Thompson

Chase Kent

Luke Simpson

Huy Le

For Sprint 3, we consolidated our own sections of the app and merged them all into the final app. Chase continued to update the GitHub site and Trello boards. Each team member recorded a video of their demo with narration and Todd edited the videos together for the Lightning Talk.

### **Android App: UI & Text Recognition (Huy Le)**

Huy was able to build an Android app that implements the Google Cloud Platform ML Kit for text recognition. This allows the app to use a photo of the book cover and return the Title and sometimes Author for use in the Google Books API query.

### **Android App: Computer Vision (Luke Simpson)**

Luke was able to build an Android app that implements the OpenCV Software Development Kit for computer vision. His app uses the Android camera with computer vision to blank the background and show the user a red rectangle that surrounds the book cover. This guides the user to frame the book cover in the appropriate way so that the text recognition system can be as accurate as possible.

### **Web Service: Google Books API (Chase Kent)**

Chase was able to build an Android app that implements a Google Books API query which results in detailed information about the book being returned from the Title and Author. Chase was able to demonstrate the app in the Lightning Talk video.

### **Web Database: Firebase Query for Books Database (Todd Thompson)**

Todd was able to build an Android app that queried the Firebase database on the Google Cloud Platform. The app also uploads the book cover photo to the Firebase database. He was also able to use his Python script for the Google Books API to query related books to be shown on the app as recommendations. Finally, Todd will be in

charge of consolidating the individual Android apps into a single app for the final presentation and demonstration.

## **Reflection**

As a team, we were able to come together in order to demo our own parts of the project for the Lightning Talk video. This allowed us to show each other our work and what we had accomplished. Since there was essentially no opportunity to meet in person, it was difficult to keep up with each others' progress so communicating on GroupMe chat was very important. Overall, I think each team member has learned a lot about working together (and sometimes apart) as a team. At times during the semester, we struggled to communicate and stay on track. We chose the Android and Google Cloud Platform because there was a lot of documentation and readily available code that we could implement, however there was still a steep learning curve for various technologies that we were not familiar with so it took more time than expected. This delayed our accomplishments by a few weeks which ultimately required us to scale back the project slightly.