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CS-3200

## Final Project Proposal (VERSION 2)

### 1. General Overview

- It's going to be a map app that displays the user's current location and the location of the Cache Valley Transit District (CVTD) busses with ads.
- It can be used to see if there is a bus near the user. The user can know if it's time to leave the warmth and safety of their home to venture to the bus stop.
- It would be useful to know if you have time to catch the bus after you brush your teeth or if you should wait for the next one and eat your breakfast etc.

### 2. Technical Challenges

- Using Kotlin will be a major challenge.
- I will need to know how to create an app, display a map box, map, get user location, add markers to a map all in Kotlin.
- I will also need to figure out how to parse XML data containing the current location position of the CVTD busses. This will be a big challenge because I'm not used to XML, I'm more comfortable with JSON and I've never used Java or Kotlin to access the intent to get data.

### 3. Framework

- I'll just be doing stock android development the same as we have been doing all semester, only in Kotlin. I'll be using android studio for the IDE. I'll be using Kotlin instead of Java, which I have very little experience with (only from Programming Languages, CS-4700), but I like it better so far.

### 4. Time Estimation

- 1 hour to create a new project in Kotlin
- 3 hours to get the map and user displayed
- 4 hours to parse the XML bus info
- 3 hours to get all the busses to display on the map and update properly
- 3 hours to implement ads
- 1 hours to add custom icon