

## **Bus Tracker Meeting #1 (1/27/20)**

### **Github Emails**

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- We should look into ways to display GPS coordinates in an app

### **Provided Bus Info**

- GPS Coordinates (Lat. Long)
- Bus Type (Loop, Upper Campus...)
- Bus ID #
- Timestamp
- ETA

### **Design Ideas**

- Look at other bus tracking apps for inspirations on feature and app design
  - <http://translocrider.com/features> ← check this one out, it's similar to what we're trying to make
- MapBox for the map?
- Display calculated ETA when bus icon is clicked, display hardcoded bus schedule when bus stop is clicked?

### **POSSIBLE(!!!) Features**

- ETA table to show all buses and their ETAs towards current bus stop. Also places specific markings/symbols on bus stops.
  - <https://ggwash.org/view/30963/whats-the-best-iphone-bus-tracking-app>
- Text-based tracking similar to the following image:
  - Same link as above
- Auto-detect user location (in accordance with iOS permissions)
- Algorithm to determine bus capacity
- Notification/PSA feature (for strikes, etc.)
- Shows what type of bus it is (Loop, Upper/Lower Campus, Special Event, etc.) and the direction it's going (clockwise or counterclockwise)
- Label dining halls/food places on campus
- Legend/Key that tells the user what the bus symbols/keys mean
- Route planner, the fastest way to get to class
- Bus icons
- Display route of different buses (route of Upper Campus differs from that of Loop, etc.)

### **User Stories**

- As a student, I want to know the exact current location of the campus busses, so I can tell if one is coming.
- As a professor, I want to know the ETA of the next available bus, so I can get to my classroom on time.
- As a visitor, I want an explanation of how the school's bus system works, so I can get to an event or place without getting lost.

- As a student late to class, I want to see how long it will take to get to class based on walking and bus times, so I can know if I will be late or not.
- As a student out late at night, I want to know if I should take a night owl or call to get a Night Safety Escort, so I can get to my dorm the safest.
- As a user of the app, I want to know where I am relative to the bus stops, so I can figure out the best route to my destination

**Links:**

<https://codewithchris.com/iphone-app-connect-to-mysql-database/>