
Where's My School Bus?



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Capstone 2021



Project Definition:

Project Description:

- Design a mobile app that lets parents know when their child's school bus will arrive.

Project Requirements

- The app should work for any bus route. ✓
- The app predicts the ETA and perhaps shows the current location of the bus. ✓
- A parent can ask the app to alert them when their children arrives home after school. ✓
- Make sure to protect the privacy of all involved. ✓
- An admin side determines the bus route, stops, and users. ⚠
- The app can start dinner for the family and help with the kid's homework so all can live happily ever after. ✗



What I did

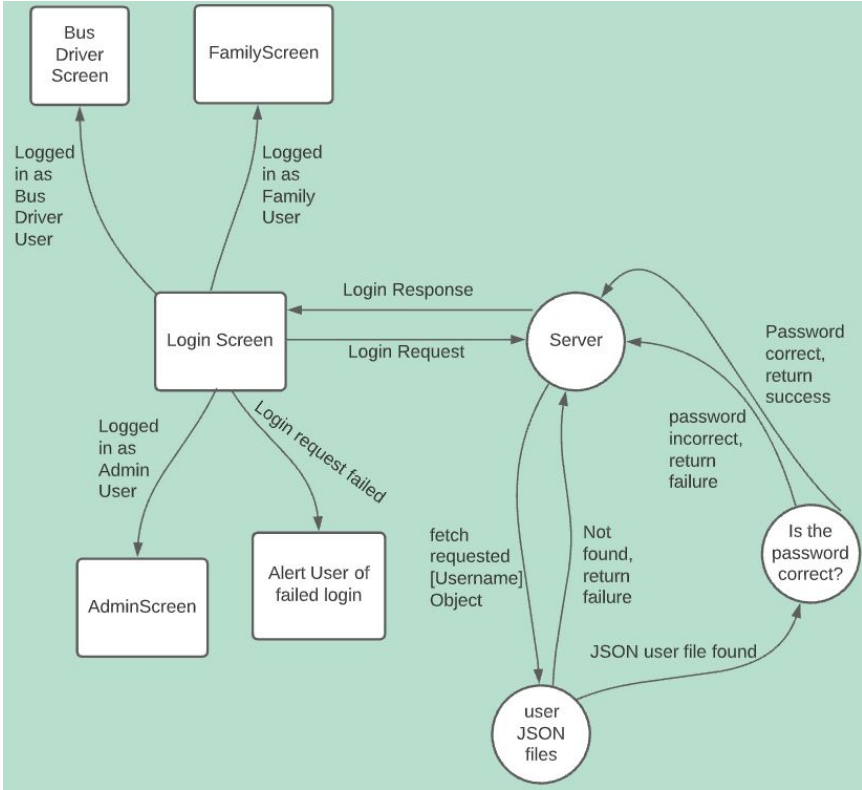
- Front-End
 - React Native
 - Works on both Android and IOS
 - Hot reloading is helpful for speedy development
 - Javascript/XML, AKA as JSX
- Back-End
 - Node JS
 - Javascript
 - Networking
 - WebSockets
 - Bilateral communication
 - Very quick



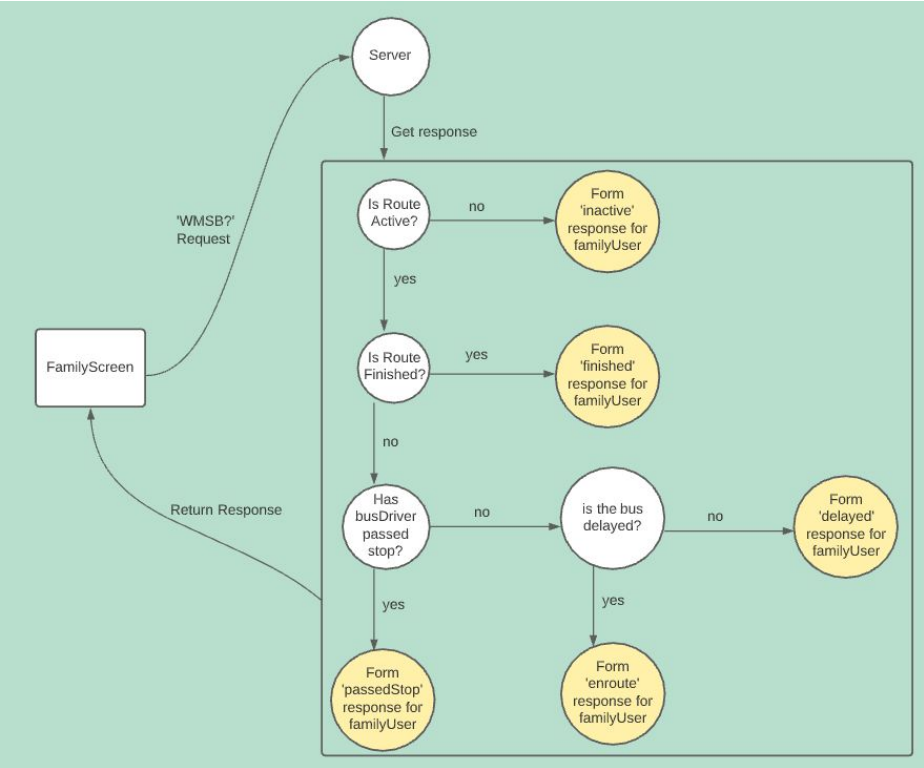
Exceptions

- An admin side determines the bus route, stops, and users.
- The app can start dinner for the family and help with the kid's homework so all can live happily ever after.
- Haven't yet made the 'Delay' button work.

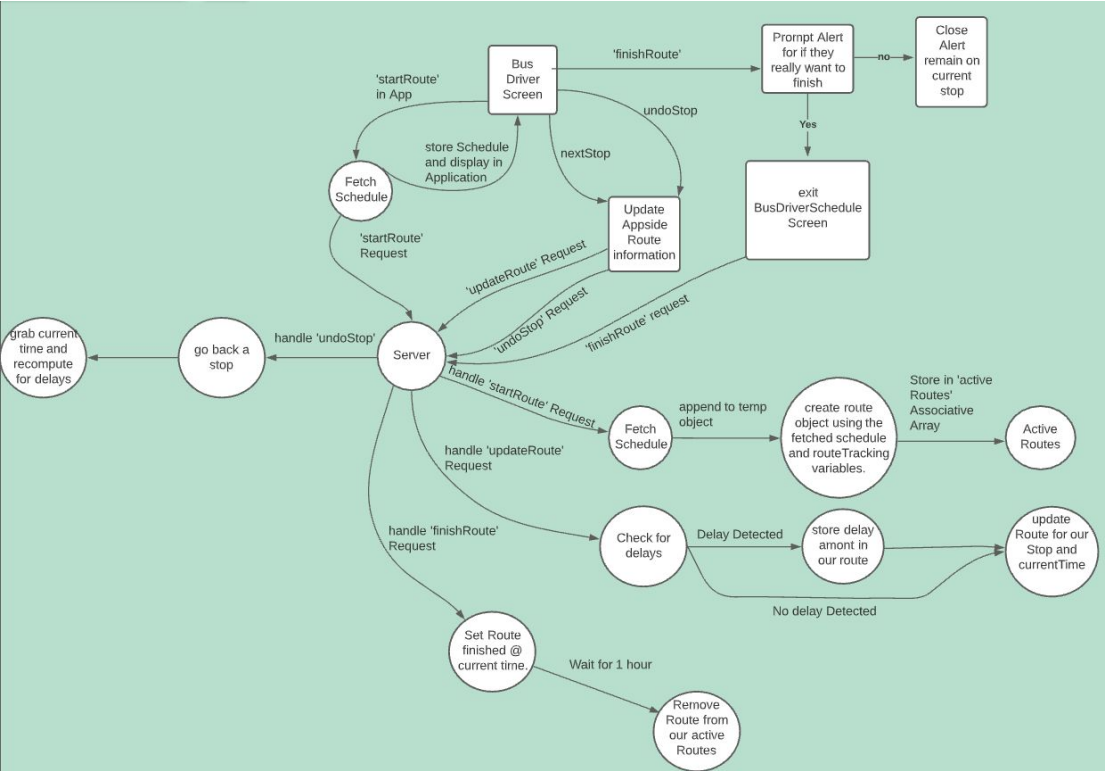
Client Server Communication pt. 1



Client Server Communication pt. 2



Client Server Communication pt. 3





Demonstration

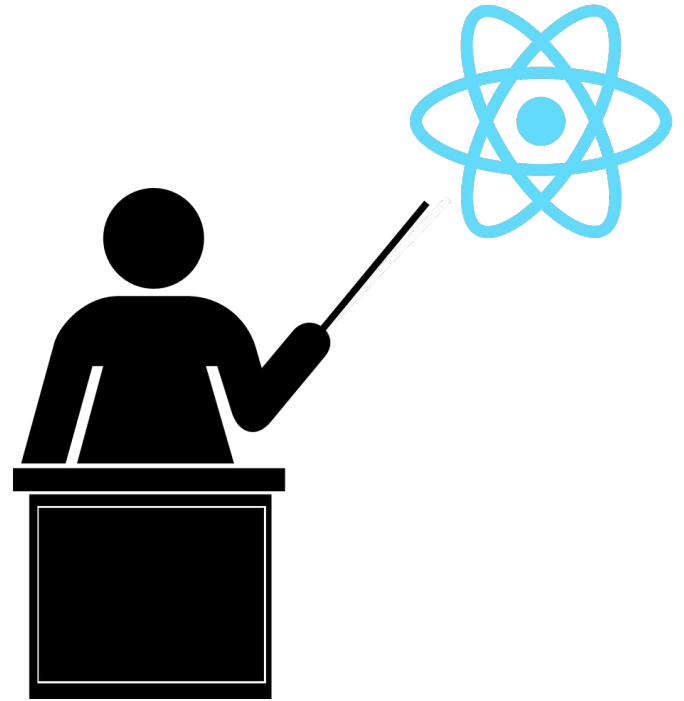


Strategies

- Diving into documentation
- JSONLint
- StackOverFlow
- Dr. McVey-Pankratz & Dr. Diederich
- Youtube



stack overflow





Extensions

- Database to store users, routes, and when they were finished
- Strong encryption library for user security
- Google Maps implementation for when the bus is approaching
- Look for alternatives to React Native

Time for some Q&A!