



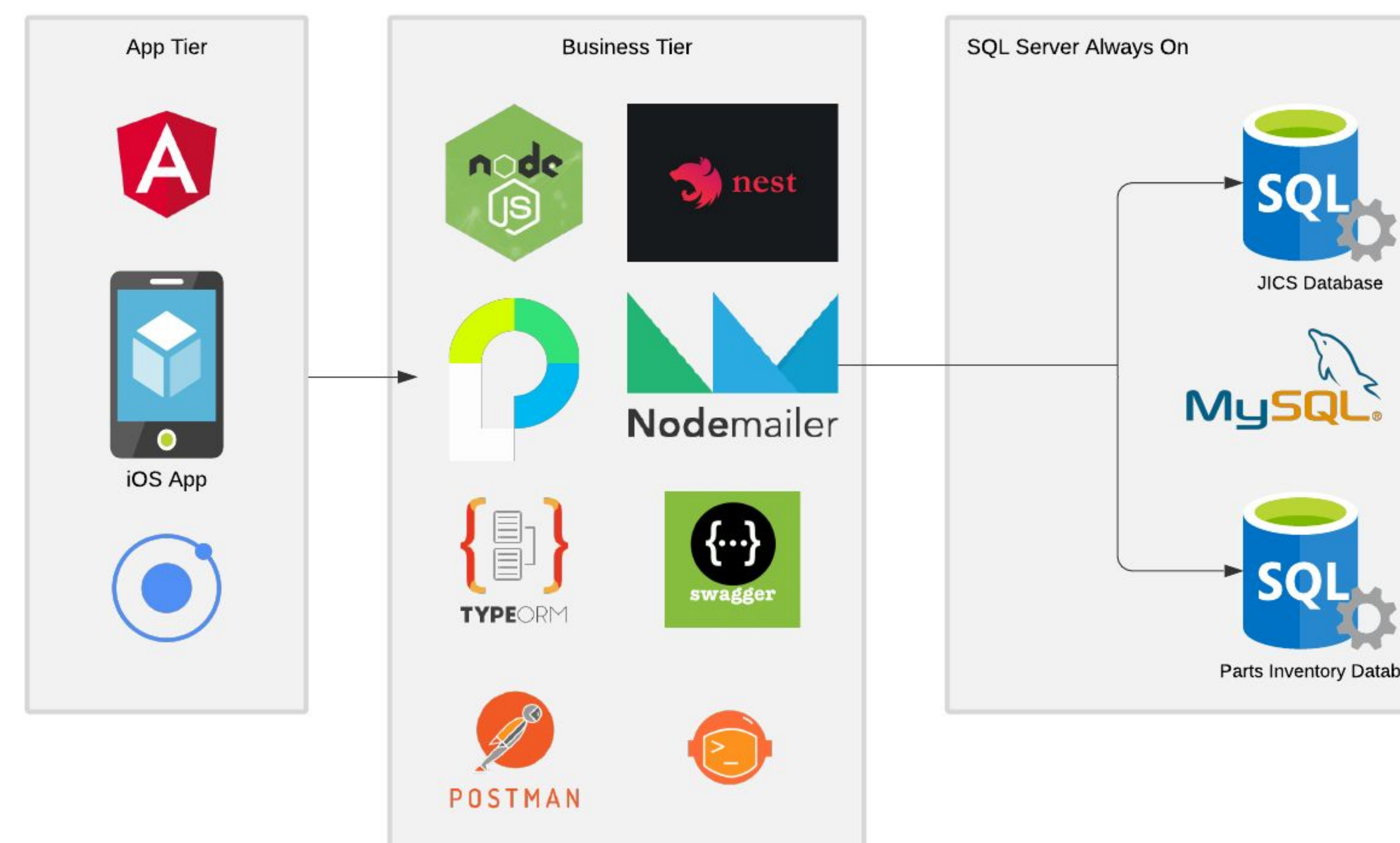
Scan Inventory

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Faculty adviser: Robert Dahlberg, Ph.D. | **Sponsor:** 4th US Circuit Court of Appeals | **Mentor:** Bob Smith

Summary

The 4th U.S. Circuit Court of Appeals had an existing inventory database and a web application to interact with it. The Court asked for a native iOS app to interact with the same database because the traditional web app was not designed for mobile devices.

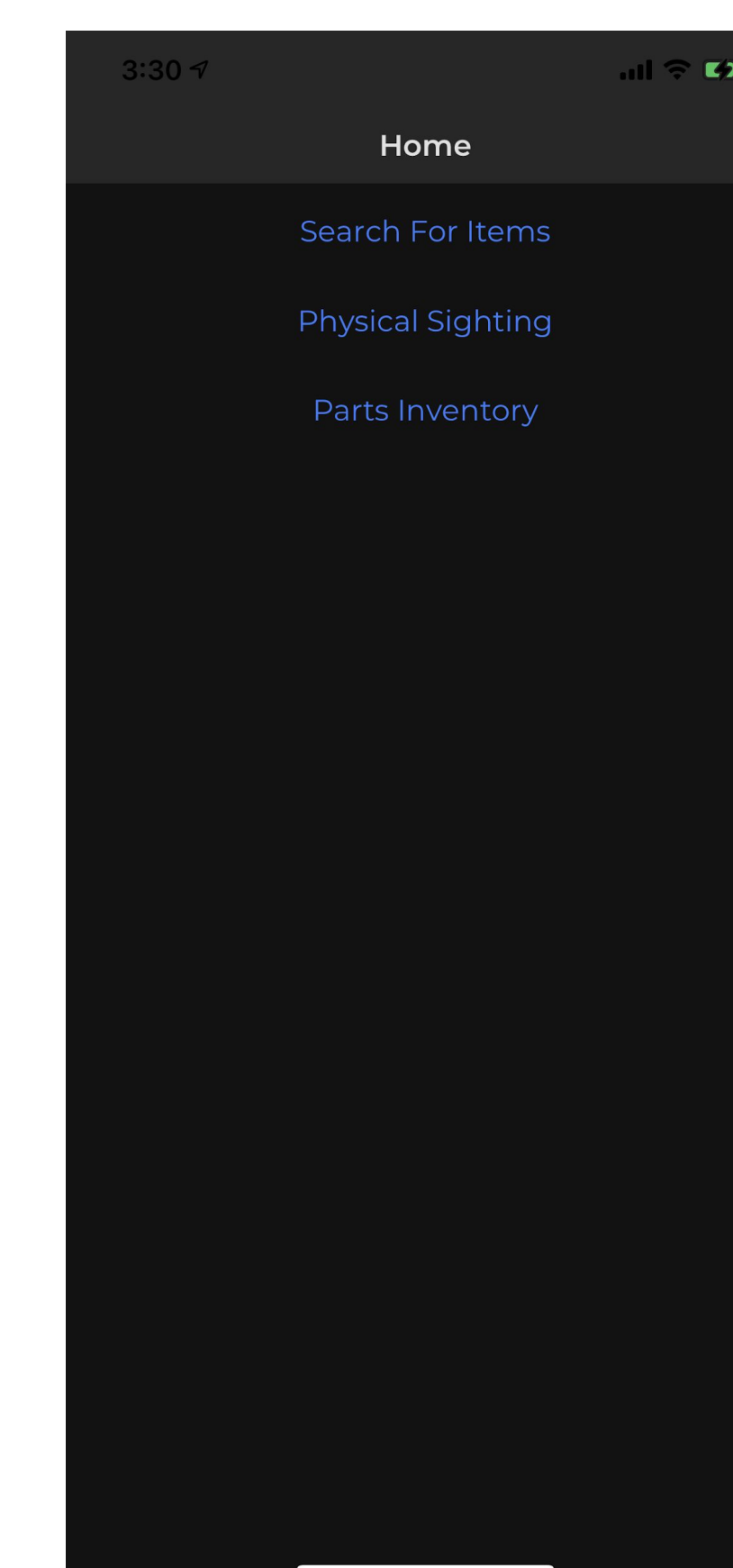
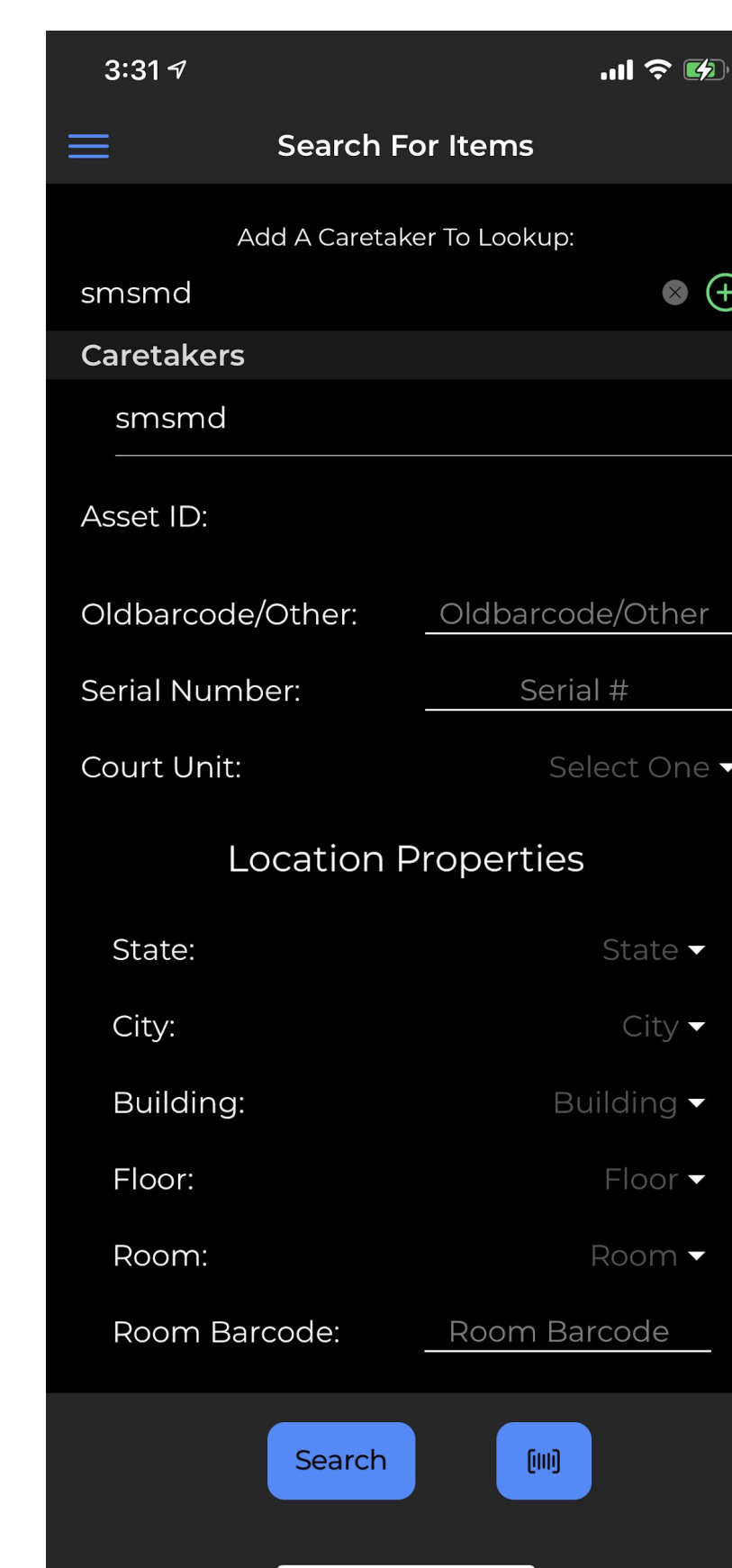
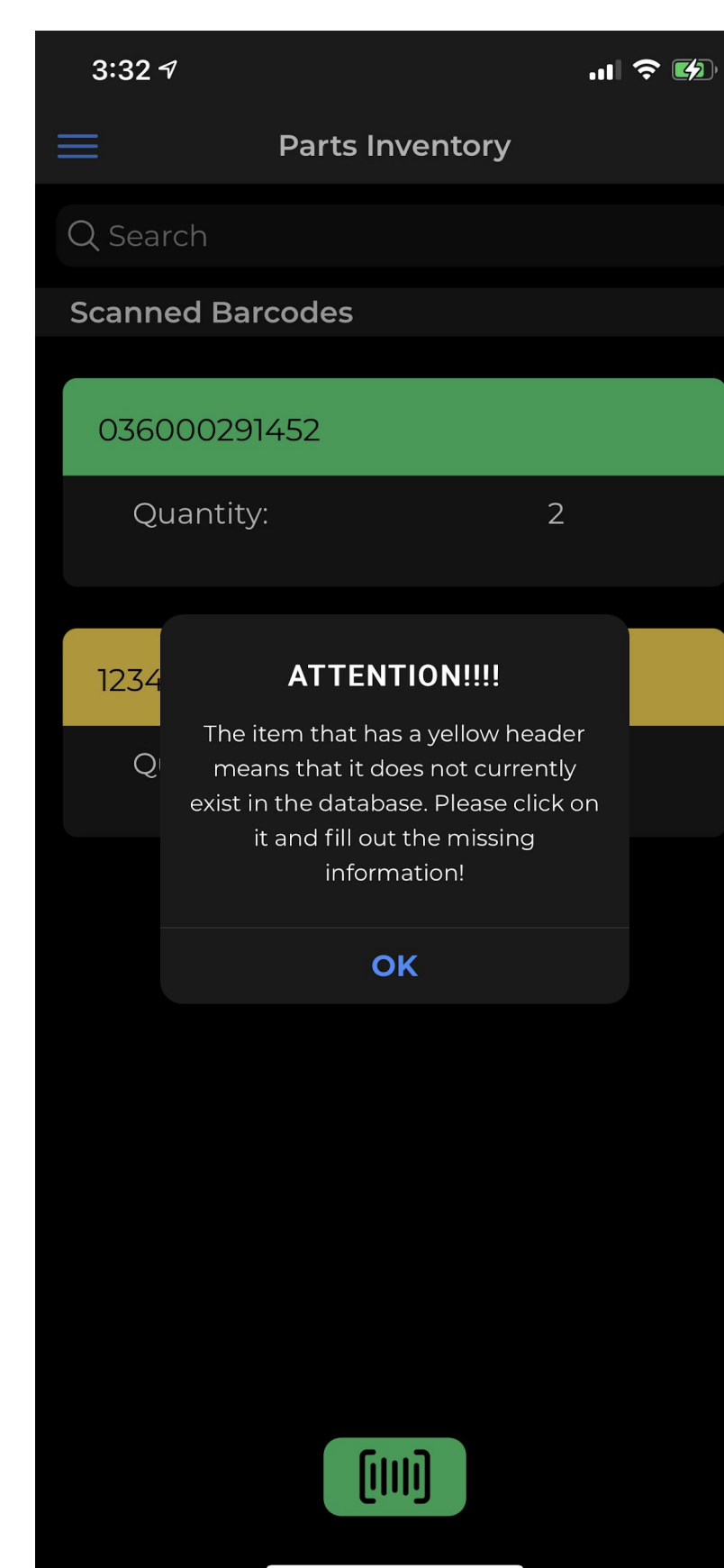
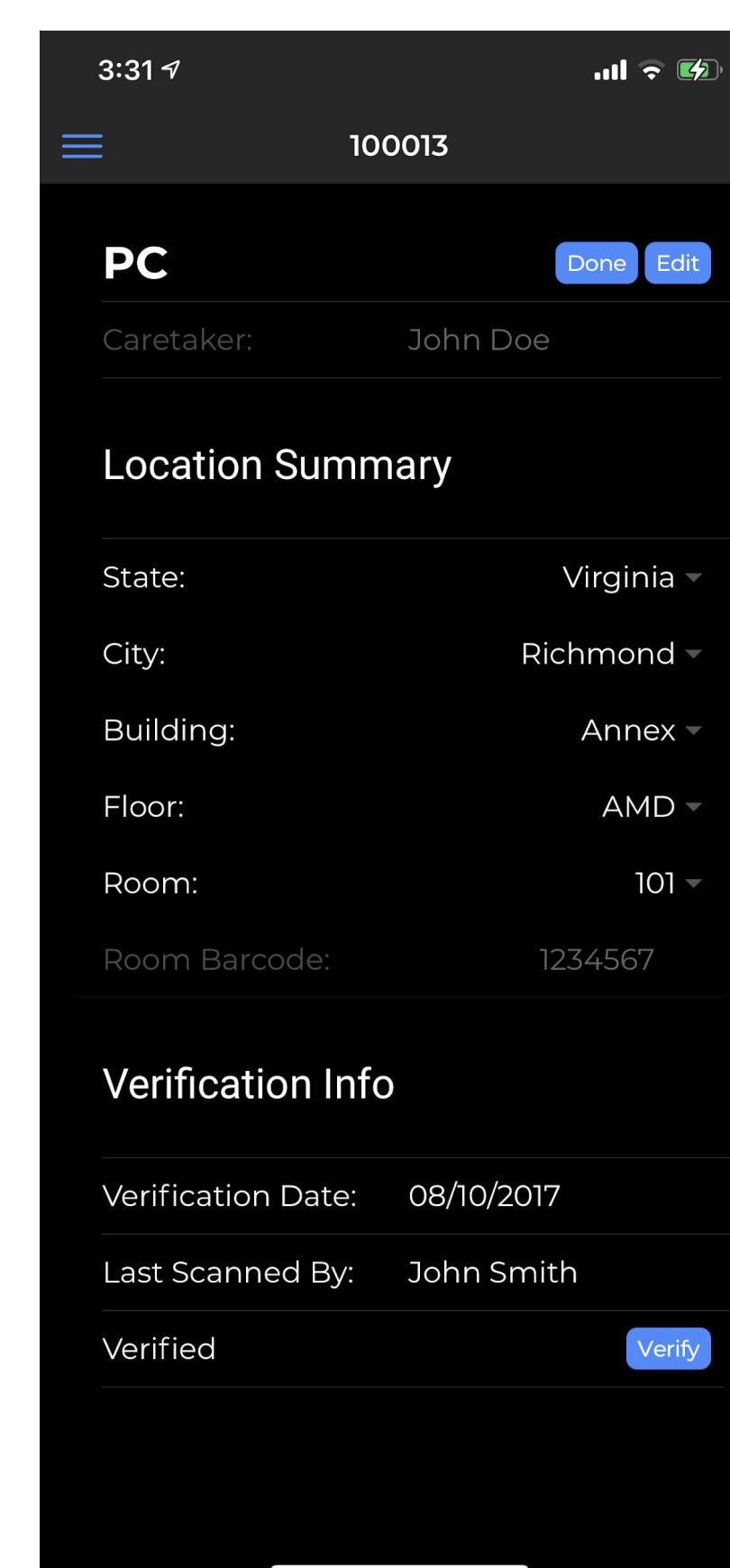


RESTful API

- Shares a similar language and file structure as the iOS app
- Secure authentication with the use of tokens
- Provides secure database interaction
- Interactive documentation of all endpoints
- Automated tests for all endpoints allows alterations with less chance of regression
- Automatically sends emails to the Custodial Officer when an asset update is requested or made
- Allows users to search for assets by a wide array of parameters

Benefits

The Scan Inventory app delivers a subset of the functionality from the existing web application in a mobile-centric way. This allows the use of on board systems such as the camera to scan barcodes while also allowing the user to easily manage inventory away from a workstation. The multi tiered approach allows the database access layer to be used by other projects in the future.



iOS Application

- Allows pre-existing users to log in
- Users can search for specific items by barcode or filter queries by many asset properties
- Assets can be updated through the app
- One or more assets can be verified by use of the user interface or by scanning barcodes
- Users are notified in the app if the location of an item being verified has changed