

Testing for Android Application:

All Android Junit tests are found in the `com.softwaredesign.group5.hokiehome (androidTest)` directory in Android Studio.

- Testing Beacon Connections and Discovery: The `BeaconApplicationTest` class can be used to test that the Beacon Manager is parsing beacons correctly. The class can simply be ran from Android Studio onto an emulator. For testing beacon detection, go to the `BeaconScanner` class and uncomment the last two lines of the constructor method. As a result, once the application is ran, simulated beacons will be created for the app to discover. The comments above those uncommented statement explains how to determine if the beacons are being found and what the results should be.
- Testing SocketIO can be done in the `SocketIOTest` class. The `Ip_Port` variable in the `SocketIO` class will need to be changed to match your respective IP address in the form of `"http://YOURIPADDRESS:9092"` in order for a connection to succeed with your server (Refer to Project Readme for more setup information). This test class can confirm that the URI format is correct, test that the connection occurs (this test WILL fail if the `Ip_Port` is not set up for your server device), and test that the correct information is being sent. This class can simply be ran in Android Studio onto an emulator. Testing that callbacks are received can occur by observing the debug log when the main screen is opened and the Add light button is clicked. The log can be filtered using the tag "Callbacks" and checking for a confirmation message.

Testing for Server:

- **Light Simulation Test:**
 - Open `LightTests.java` in eclipse and run it as a JUNIT test
 - When prompted, open `Hokie Home Server/src/test/main/html/LightSimulatorTest.html` in your browser and follow the instructions in the eclipse console.