This is an implementation guide for connections between server (Raspi) and client (Android app).

## Client - Server Handshake

## Server Initial Setup

## Client Initial Setup

## Left Turn Light (client)

The ImageView will have an initial state, false because the left turn light should be off. When the user presses the image icon (ImageView) the client (Android app) will call a local function “setTurnLightState(direction=left, state=true/false)” which will change the initial state to the new one, change the image to ImageView and will contact server “set\_turn\_light(direction=left, state=true/false)”.

*TODO find another implementation because this will have issues due to concurrency. Imagine the scenario where the user sets the light state to true and the thread to the client reads the previous state which will be false*: A Thread (feedback\_info\_thread) will run continuously and will contact server “get\_turn\_light(direction=left)” to get the current state from the server and call the “setTurnLightState(direction=left, state=true/false)”.

*POSSIBLE SOLUTION*: A server(NanoHTTP) will run at the client (Android app) which will receive a request from the server (Raspi) about the left turn light state whenever it changes. Then the client should call the local function “setTurnLightState(direction=left, state=true/false)” according to the request data it receives.

## Left Turn Light (server)

## Left Turn Light (hardware)