Hack the South Project Specs

Goal

1. Estimate attendance in a certain enclosed area (lecture)
2. Traffic estimation within a certain area
3. **Data privacy,** no IP, mac address storage, but identification in anonymous way

Demo

1. Linux machine for data scanning
2. Front end (web) to display and interact with data

Project Flow

Only access to mac address

Devices required: central server, scanning client

Data Collection (client)

* Scan all nearby devices’ mac address
  + Tools:
    - Nmap
  + Possibly identify OS
* Data format:
  + json
* Data encryption, for sending data to the server
* (TODO) Get approximate range of device (target) and scanning client

Data Process (Server)

* Encryption for mac address for privacy concern
* Remove redundant entries
* Perform analysis on data before storing

Data storage (Server)

* nosql

Data Display (other client)

* Web interface
  + Login
  + Graph: heatmap

Future road map