

# CSE 465 Mobile Computing Assignment & Midterm exam



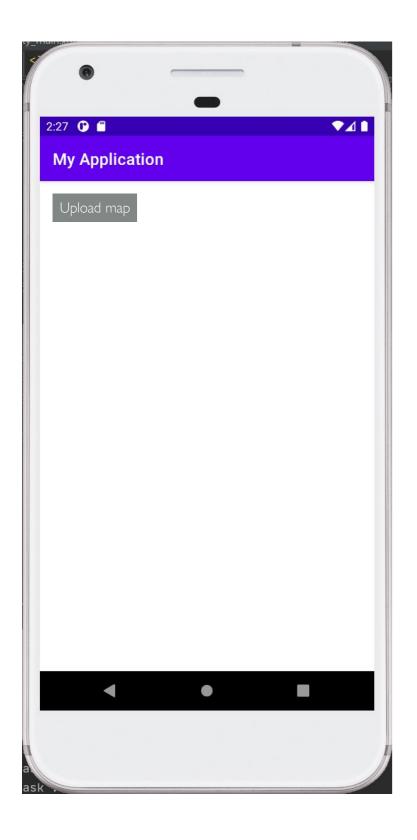


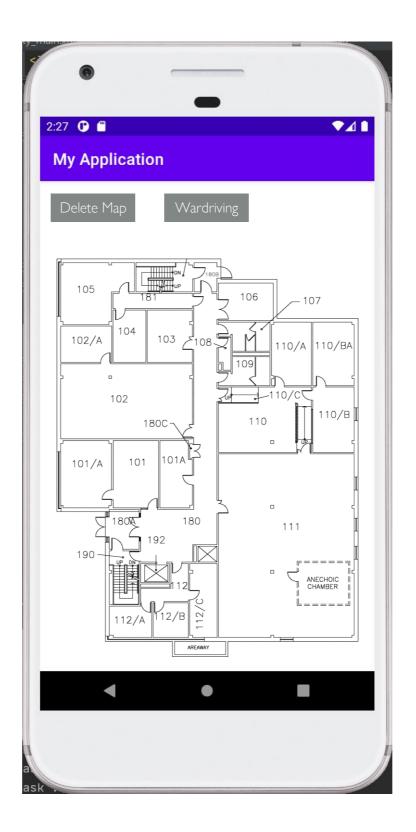
### Assignment: overview

- Implement a WiFi-based localization app
- Languages: Java/Kotlin in Android and Swift in iOS
- Functions
  - Upload/delete a floor map from photo album
  - Wardriving mode: choose a position on the map, scan APs, save the collected information
  - Real-time localization mode: scan APs and find the fittest position and show the position on the map



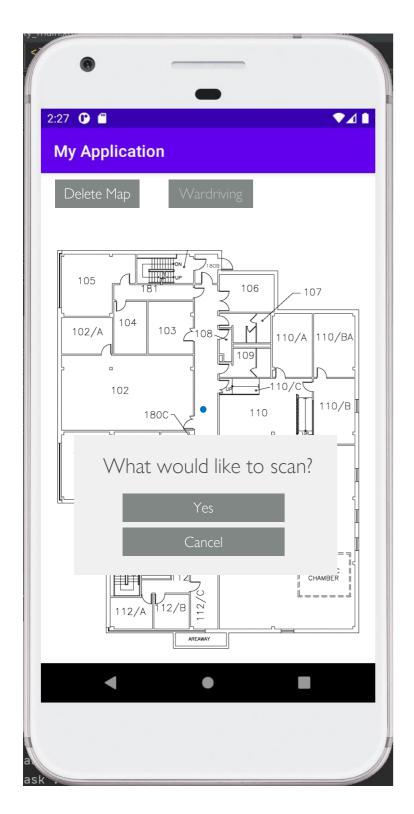
### Assignment: upload/delete a floor map

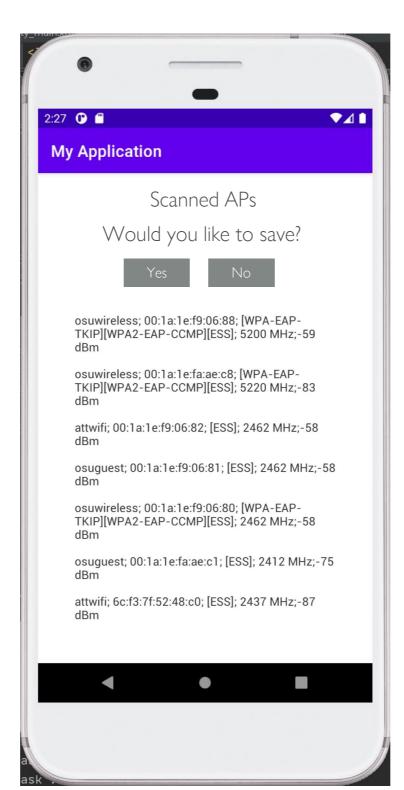


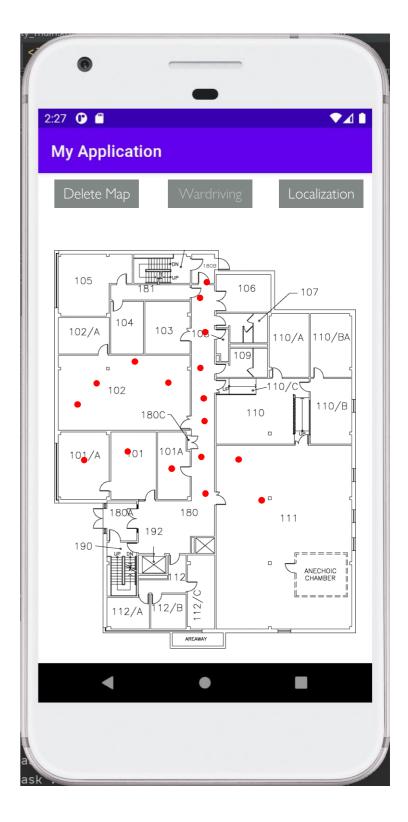




#### Assignment: wardriving mode

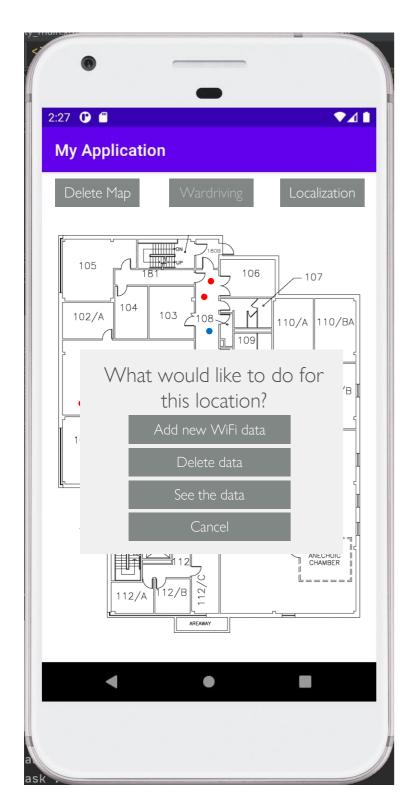


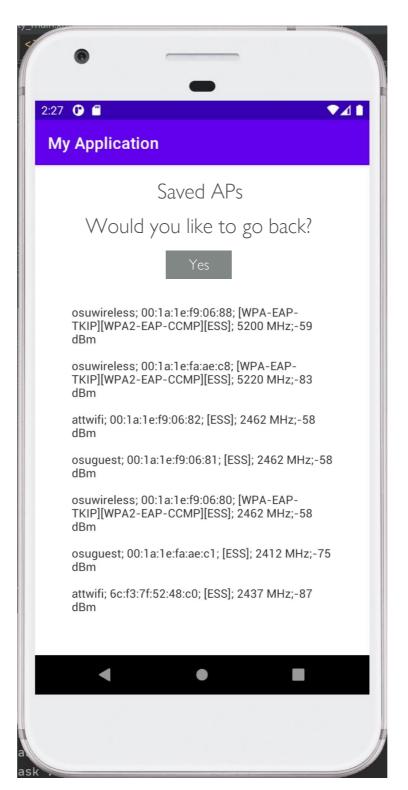






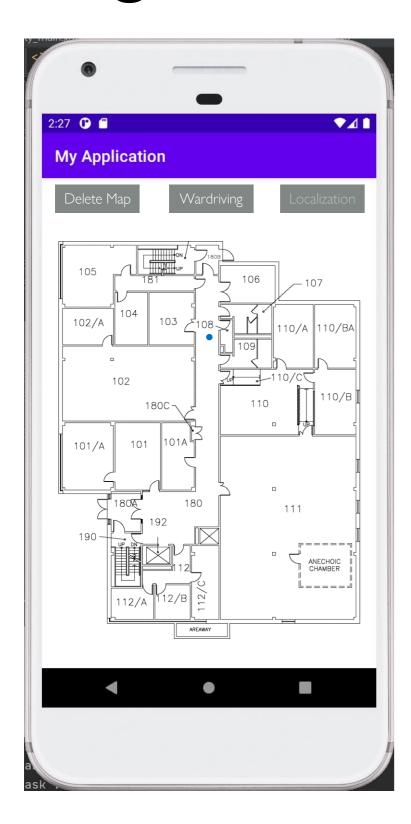
### Assignment: wardriving mode

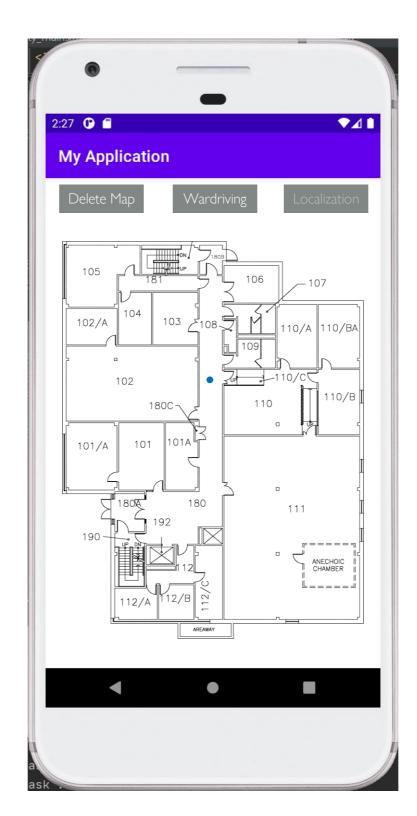






#### Assignment: real-time localization mode







### Assignment: submission

- Deadline: May 12<sup>th</sup> (midnight)
- By Blackboard
- Submit a report(development environment, implementation details, experiment result), source code, APK file (for only Android), experiment video (captured screen)
- 20% deduction per day if you submit late



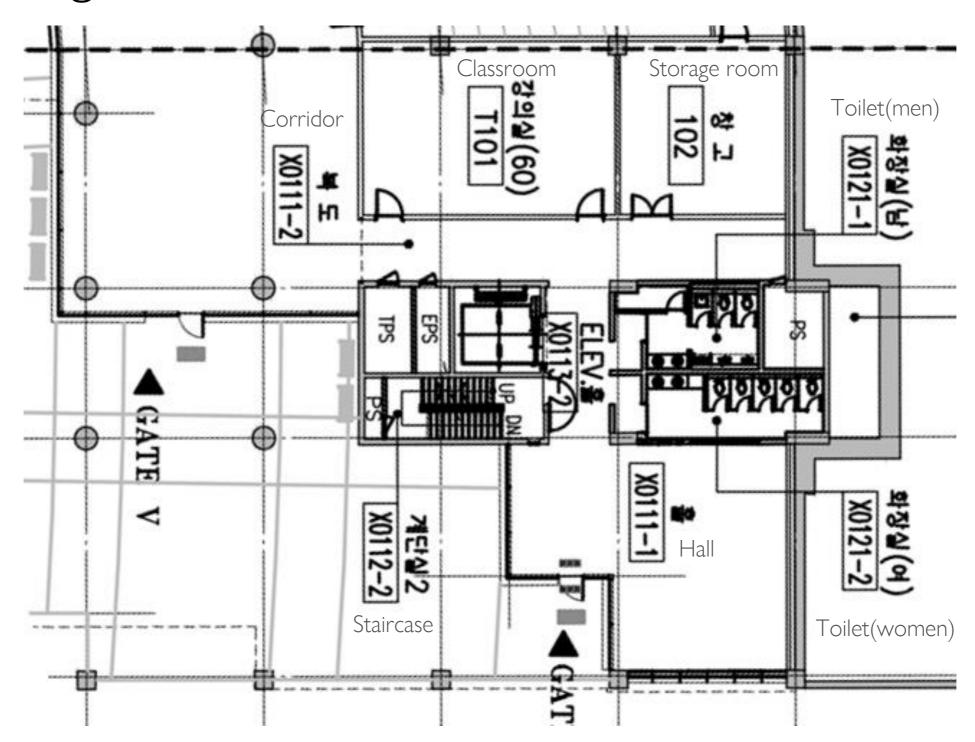
### Assignment: some details

- You can do the experiment on building 106 1<sup>st</sup> and 2<sup>nd</sup> floors
- You should provide the details about your algorithm, and discuss it in the report
- You don't need to do too much of wardriving. Showing it works well over some areas is enough



### Assignment: floor map

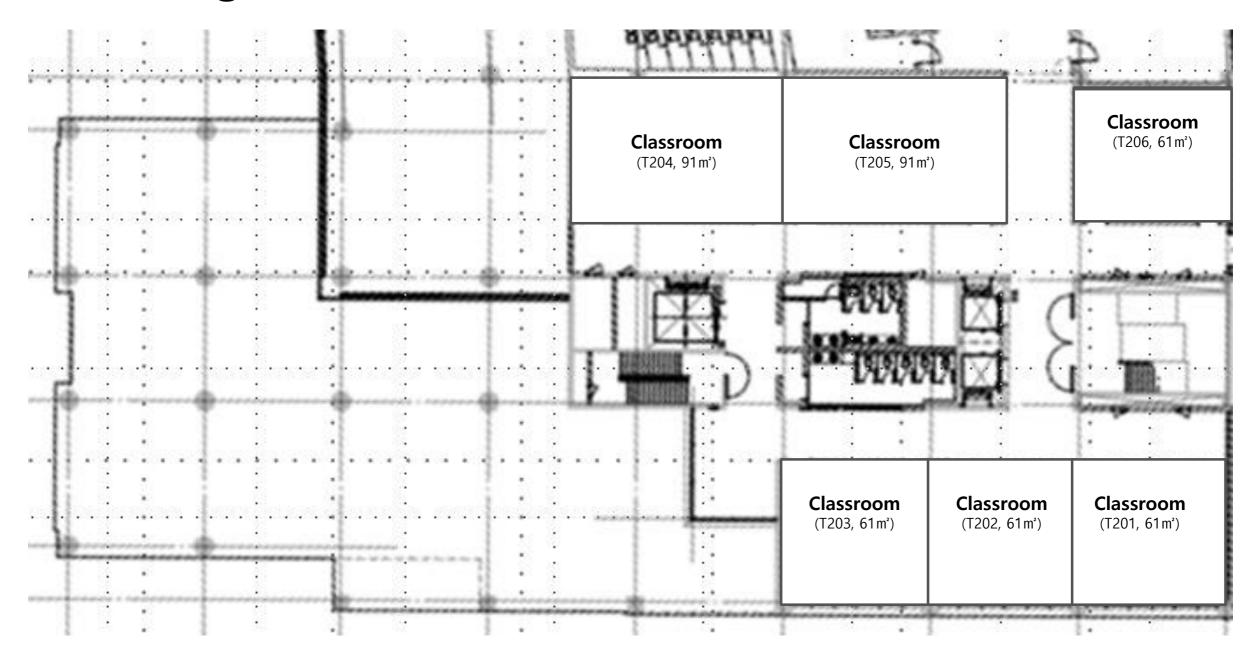
Building 106 1st floor





## Assignment: floor map

• Building 106 2<sup>nd</sup> floor





#### Midterm exam

- Date: Apr 19<sup>th</sup> (Wed)
- Time: 14:30-15:45
- Coverage:
  - 1. Introduction ~ 6. Mobile Cloud Computing
  - Android Programming