Architecture specification

Our system contains basically of two major parts, the database and the overlay system. The database receives data from a .txt file that includes information about a lecture room, which door-house coordinates, floor and building the lecture room can be found. The activity “ChooseLocationActivity” displays all classroom and send the necessary information to class “CTHMapActivity”, which communicate with package overlay.

All logic regarding overlays are handled in the OverayHolder class. The overlays are either BuildingOverlays, which mark the entrances of the buildings on the map, or MarkerOverlays which are the destination markers and the marker at the users current position. The OverlayHolder recieves coordinates for the building that has been chosen and sets BuildingOverlays on the map according to these coordinates. It also handles touch events on the screen and sets destination markers accordingly.

Database Schedule

Tables:

- **Coordinate**
- **LectureRoom**
- **House**

Coordinate:

- **id:** integer
- **coordinates:** text

LectureRoom:

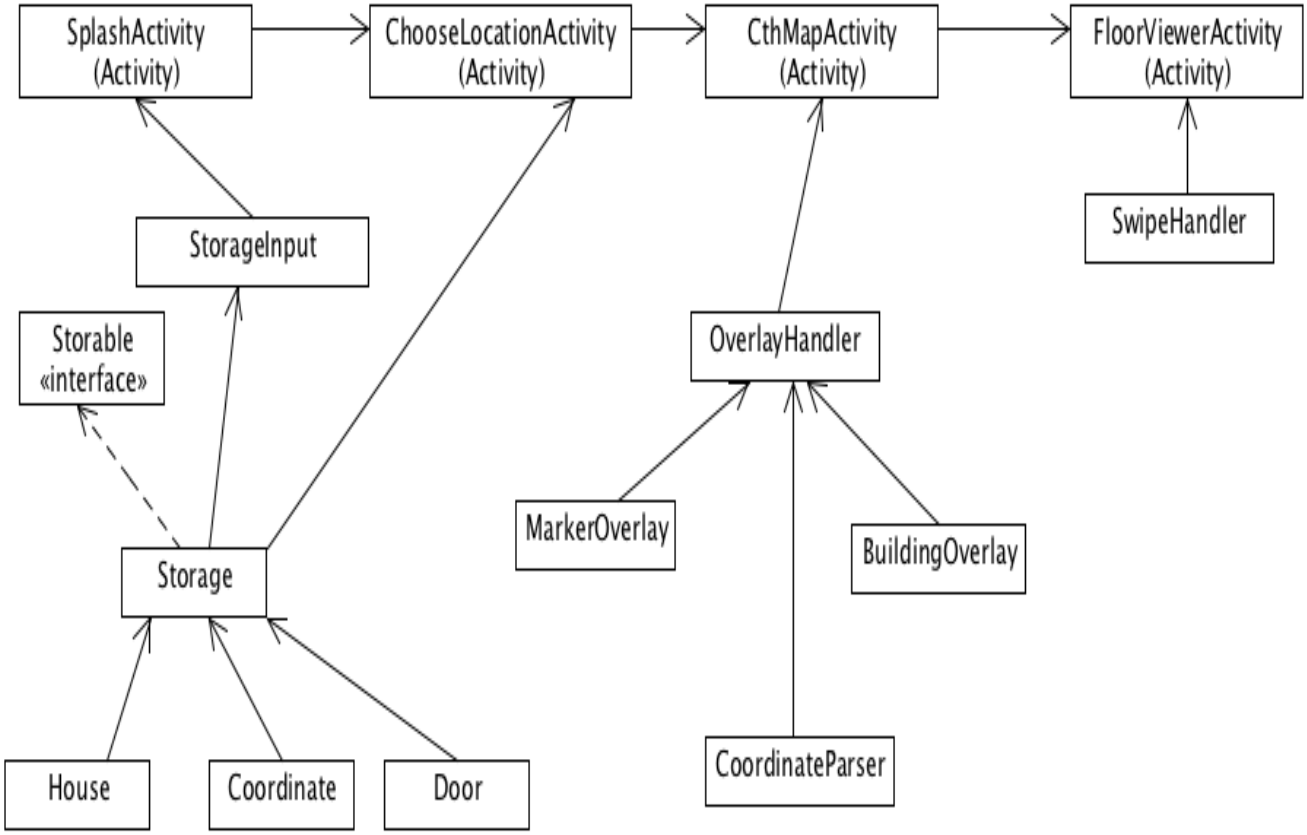
- **id:** integer
- **lecture room:** text
- **floor:** text

House:

- **id:** integer
- **house:** text
- **door coordinates:** text

The tables are connected with each other through an id. For example if lecture room “Hubben” is id number one you can receive all necessary information about Hubben by asking the tables what they contains that are connected with id one.

An overall guide of our code structure:


SplashActivity
(Activity)
ChooseLocationActivity
(Activity)
CthMapActivity
(Activity)
FloorViewerActivity
(Activity)
StorageInput
SwipeHandler
Storable
«interface»
OverlayHandler
MarkerOverlay
BuildingOverlay
Storage
House
Coordinate
Door
CoordinateParser