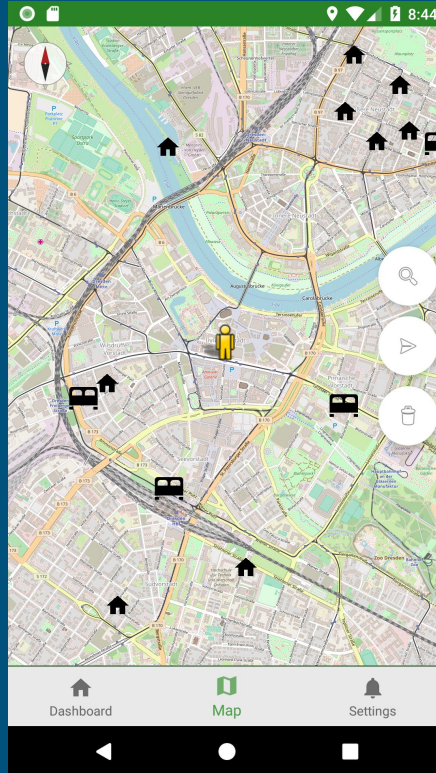
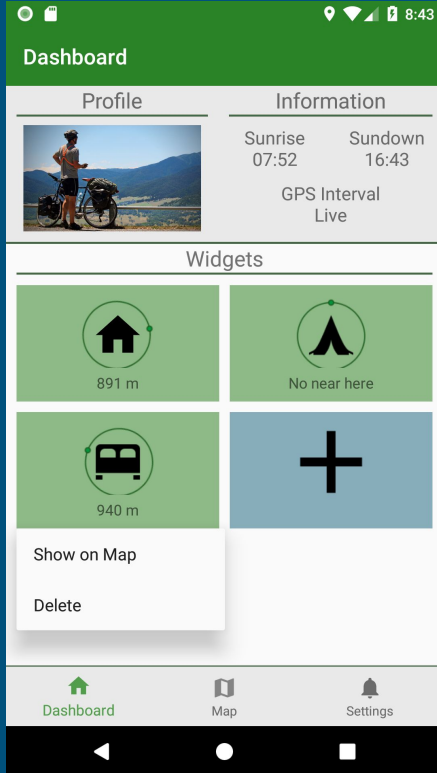


The Adventurer App

Final Product



The Application



Live-Demo

Technologies



Adventurer App

 **Kotlin**



Sensors

Magnetic Field for compass

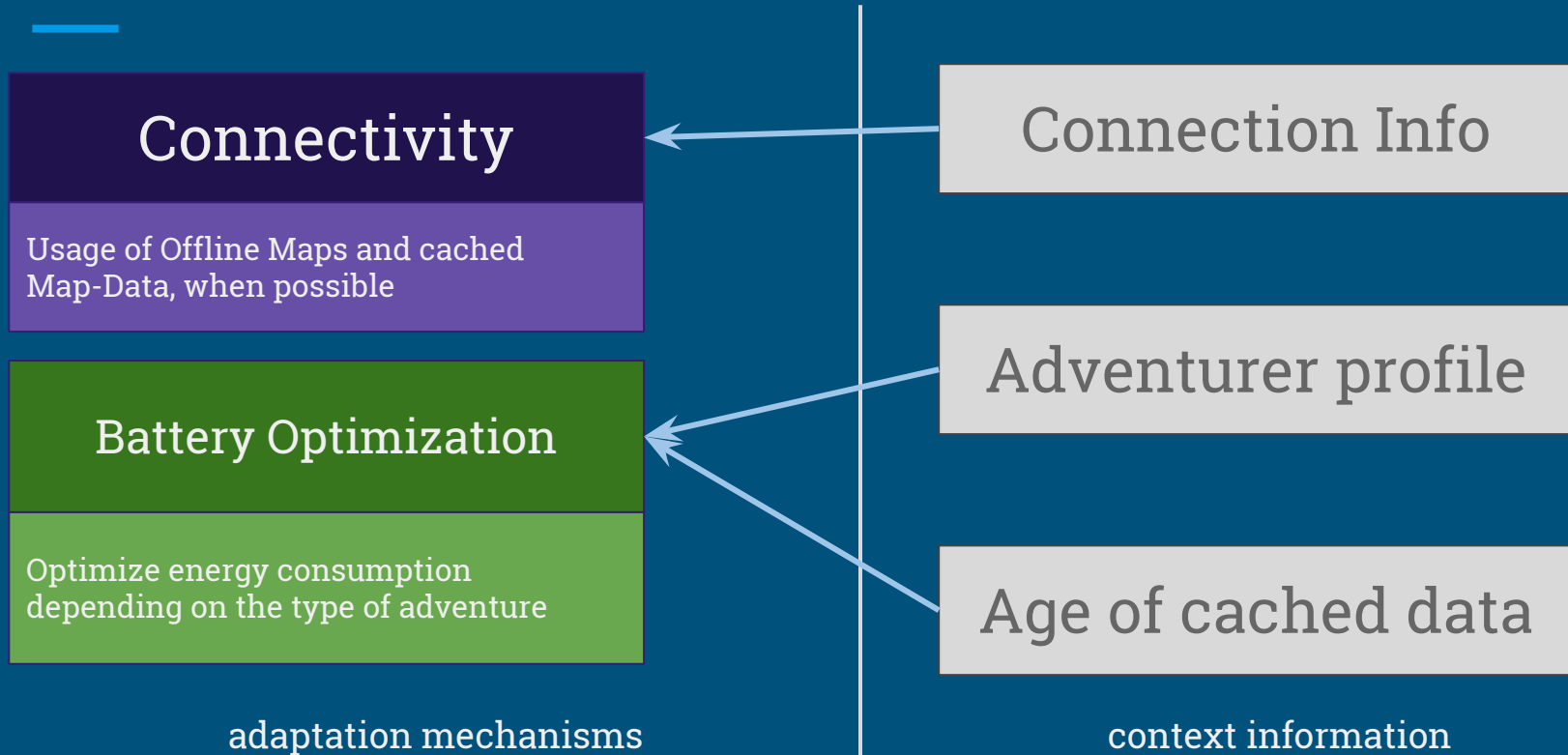
Google Location API

dynamic GPS

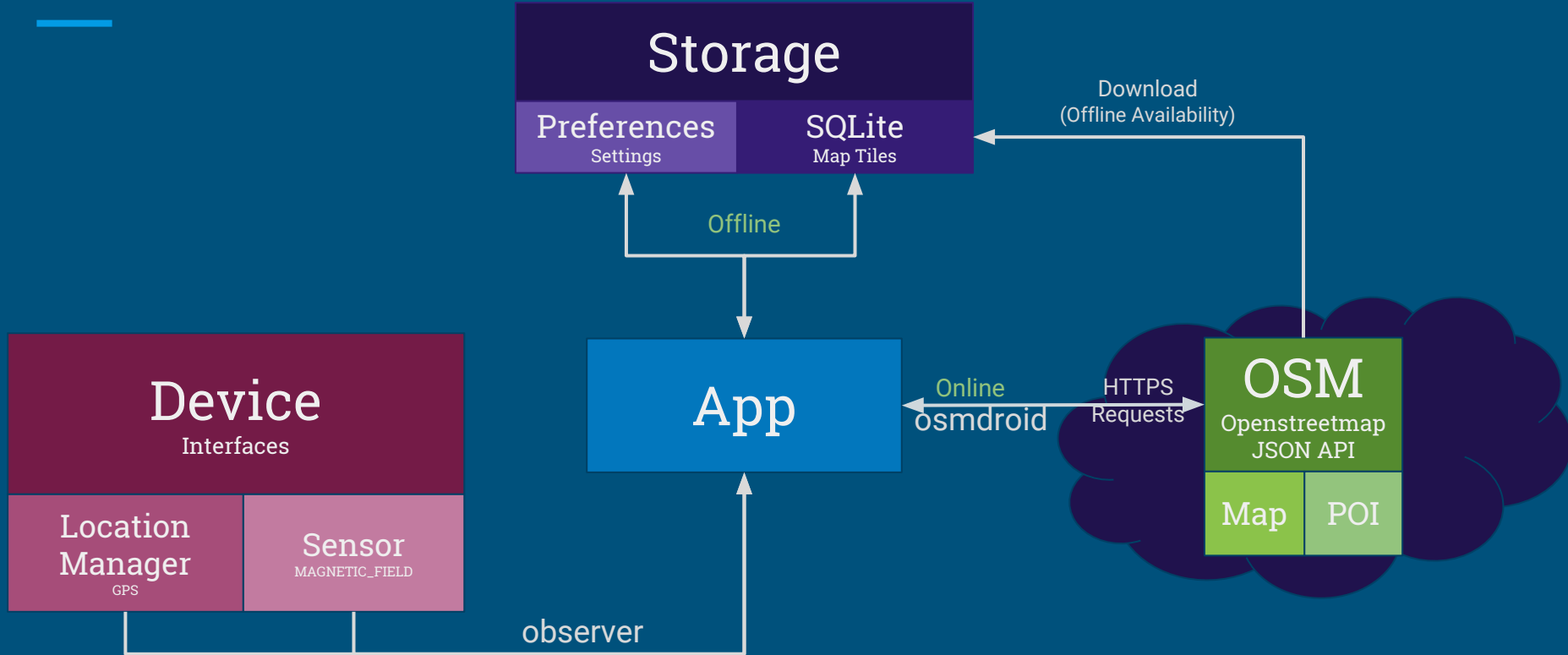
OSMDroid

Map Data and POI

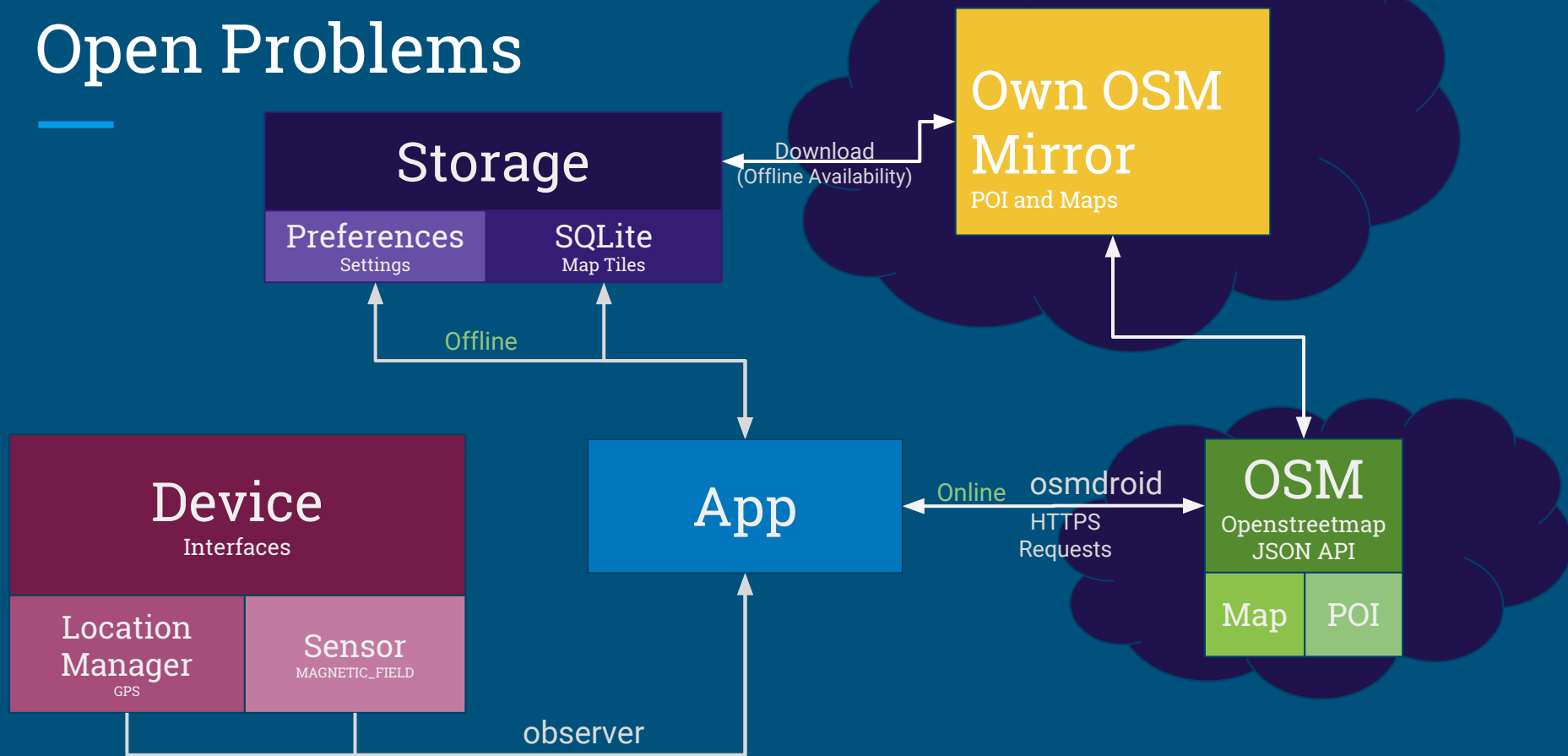
Challenges



Final Architecture



Open Problems



Open Problems

- Issues with public OSM Servers
- They have limited bandwidth and requests
 - You can't load > 500 POIs at the same time
 - Map download is very slow
 - Fix: Setup own server with OSM data and provide the data that way

What have we learned?

Kotlin >> Java

Code Comparison

Java

```
TextView text = (TextView) findViewById(R.id.textView);  
text.setText("Hello World");
```

Kotlin

```
textView.setText("Hello World")
```


What have we learned?

Kotlin >> Java

Implementing
compass and GPS
is harder than
expected

Creating
performance issues
is easy

...
Correcting them is
hard

Use
available
API's!