

Frameworks and libraries used

- Akka HTTP with Spray Json, Cors and Testkit for testing
- Typesafe Config
- ScalaLogging
- ScalaTest
- ScalaMock

REST API:

- /v1
 - /login
 - POST – returns id of the driver if password is correct
takes JSON with fields:
 - username: string
 - password: string
 - /driver/id
 - GET – returns driver info including type (regular or VIP)
 - /meter/id
 - GET – returns meter info including status (started/stopped), current time, fare amount etc.
 - PUT – returns OK on success
 - takes JSON with fields:
 - action: start | stop
 - currency: PLN (only really matters when action = start)

Assumptions

I assumed that it is not necessary to implement authentication for the whole API – in a real world application, the backend would not be exposed publicly, or it would require an API key/token with each request.

For testing purposes, starting a meter resets its fare – in a real application it would make more sense to keep the fare going, and decrement it when processing a payment.

I assumed that isn't necessary to implement different parking space locations – each driver is associated with one meter of their own.

I assumed that it isn't necessary to implement a frontend (GUI)