

Overview

This is an overview of the project [Project](#).

For this project:

- I choose, Gradle, Java 8, Visual Studio Code, And SpringBoot
 - Reasons:
 1. Gradle for the wrapper easy deployment on TA' s testing environment
 2. Java 8 for the standard OOP style, and my familiarity
 3. VSC for the light weight, and less IDE magics
 4. SpringBoot for the light weight, and Tomcat inclusion

Haomin Shi @ Nov 18th, 2018 Final Project

```
haominshi@Haomins-MacBook-Pro:~/GitRepo/ObjectOrientedDesign/Project$ tree src
```

```
src
```

```
├── main
│   ├── java
│   │   ├── App.java
│   │   ├── AppContract.java
│   │   ├── AppPresenter.java
│   │   ├── jsonUtil
│   │   │   ├── NoteToJsonConvertor.java
│   │   │   ├── NoteValidator.java
│   │   │   ├── OrderToJsonConvertor.java
│   │   │   ├── OrderValidator.java
│   │   │   ├── ParkToJsonConvertor.java
│   │   │   ├── ParkValidator.java
│   │   │   ├── ResponseJsonParser.java
│   │   │   └── VisitorModelToJsonConvertor.java
│   │   ├── model
│   │   │   ├── noteModel
│   │   │   │   ├── NoteEntry.java
│   │   │   │   └── NoteModel.java
│   │   │   └── orderModel
```

generated by [haroopad](#)

```
| | | | └─ OrderModel.java
| | | └─ parkModel
| | | | └─ LocationInfoModel.java
| | | | └─ ParkModel.java
| | | | └─ PaymentInfoModel.java
| | | └─ vehicleModel
| | | | └─ VehicleModel.java
| | | | └─ VehicleTypeInfoModel.java
| | | └─ visitorModel
| | | └─ VisitorModel.java
| | └─ park
| | | └─ Park.java
| | | └─ ParkContract.java
| | └─ responseCode
| | | └─ BadRequestResponseCode.java
| | | └─ CreatedResponseCode.java
| | | └─ NotFoundResponseCode.java
| | | └─ OkResponseCode.java
| | | └─ ResponseCodeContract.java
| | | └─ StatusCodes.java
| | └─ search
| | | └─ NoteSearch.java
| | | └─ OrderSearch.java
| | | └─ ParkSearch.java
| | | └─ VisitorSearch.java
| | └─ storage
| | | └─ Storage.java
| | | └─ StorageContract.java
| | | └─ StorageEntity.java
| | └─ util
| | | └─ ArrayFormatter.java
| | | └─ DateHelper.java
| | | └─ IdGenerator.java
| | | └─ NumberFormatter.java
| | | └─ PriceCalculator.java
```

```
|   └─ resources
|       └─ application.properties
└─ test
    └─ java
        ├── AppPresenterTest.java
        ├── AppTest.java
        ├── ArrayFormatterTest.java
        ├── IdGeneratorTest.java
        ├── LocationInfoModelTest.java
        ├── NoteToJsonConvertorTest.java
        ├── NumberFormatterTest.java
        ├── ParkModelTest.java
        ├── ParkTest.java
        ├── ParkValidatorTest.java
        └─ PaymentInfoModelTest.java
    └─ mockData
        └─ createPark1.json
```

18 directories, 53 files

Build the project:

- Build // do it at the project root dir i.e `~/project/.`

```
haominshi@Haominshi-MacBook-Pro:~/GitRepo/ObjectOrientedDesign/Project$ ./gradlew clean build
```

- Run // do it at the project root dir i.e `~/project/.`

```
haominshi@Haominshi-MacBook-Pro:~/GitRepo/ObjectOrientedDesign/Project$ ./gradlew run
```

- The Project will be running at base url — `http://localhost:8080/parkpay/`
 - Example — `http://localhost:8080/parkpay/hello-world`

Tasks Checks

PARKS

- ☒ Create park (POST /parks)
- ☒ Update park [pid] (PUT /parks/[pid])
- ☒ Delete park [pid] (DELETE /parks/[pid])
- ☒ View all parks (GET /parks)
- ☒ View park detail (GET /parks/[pid])
- ☒ Search parks (GET /parks?key=keyword)
- ☒ View all notes associated with park [pid] (GET /parks/[pid]/notes)
- ☒ View note associated with park [pid] (GET /parks/[pid]/notes/[nid])
- ☒ Create note and associate it with park [pid] (POST /parks/[pid]/notes)

NOTES

- ☒ View all notes (GET /notes)
- ☒ View note identified by [nid] (GET /notes/[nid]).
- ☒ Update note [nid] (PUT /notes/[nid])
- ☒ Search notes (GET /notes?key=keyword)

ORDERS

- ☒ Create order (POST /orders)
- ☒ View all orders (GET /orders)
- ☒ View order [oid] (GET /orders/[oid])
- ☒ Search orders (GET /orders?key=keyword)

VISITORS

- ☒ View all visitors (GET /visitors)
- ☒ View visitor [vid] (GET /visitors/[vid])
- ☒ Search visitors (GET /visitors?key=keyword)

REPORTS

- ☐ Get list of available reports (GET /reports)
- ☐ Get report identified by [rid] (GET /reports/[rid]{?start_date=YYYYMMDD&end_date=YYYYMMDD})

SEARCH

- ☐ Search (GET /search?
key=keyword{&start_date=YYYYMMDD&end_date=YYYYMMDD})

All Tasks

- You can view all available gradle tasks via

```
haominshi@Haomins-MacBook-Pro:~/GitRepo/ObjectOrientedDesign/Project$ ./gradlew tasks
```

Stats

- Total Lines of Code sourceCode vs Compiled: ..

```
Start counting...
Counttting took 283 ms. The result is:
  total:    11,971
  code:     10,961
  comment:   266
  blank:     744
Start counting...
Counttting took 1807 ms. The result is:
  total:    647,585
  code:     642,613
  comment:   267
  blank:     4,705
```

- Lines in unittests:

```
haominshi@Haomins-MacBook-Pro:~/GitRepo/ObjectOrientedDesign/Project$ ./gradlew jacocoTestReport
```

Then you can view the report under the gradle build dir under the report folder.

- For Code complexity:

```
haominshi@Haomins-MacBook-Pro:~/GitRepo/ObjectOrientedDesign/Project$ ./gradlew cloverGenerateReport
```

Then you can view the code complexity report at the build dir under the report, and then clover dir.

Challenges:

Complete this project under 2 weeks is a challenge... I should've started the project earlier