E-Scooter Verwaltung

Team “¯_(ツ)_/¯”

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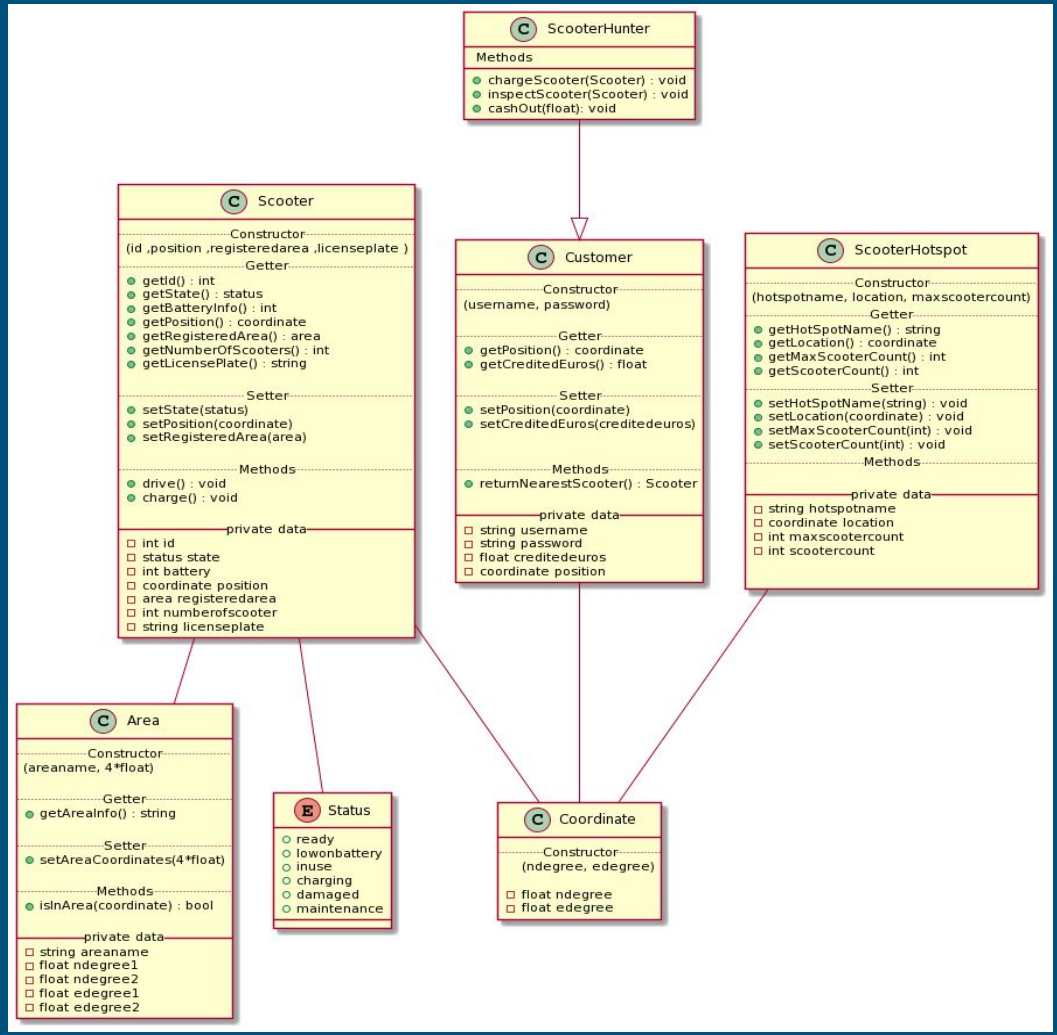
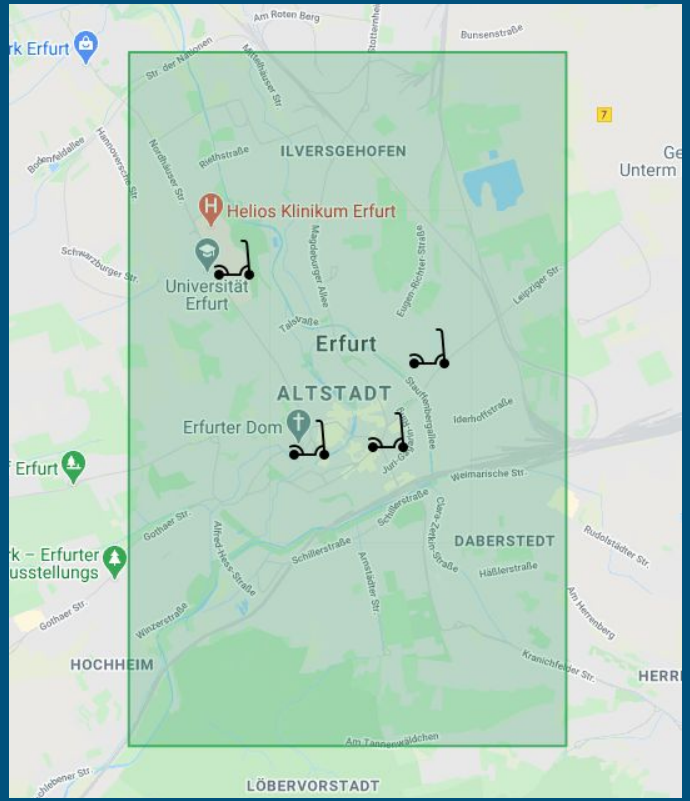
Gliederung

- UML
- Hotspots / Area
- Scooter Hunter
- Customer
- Code
- erster Test
- weiteres Vorgehen

UML

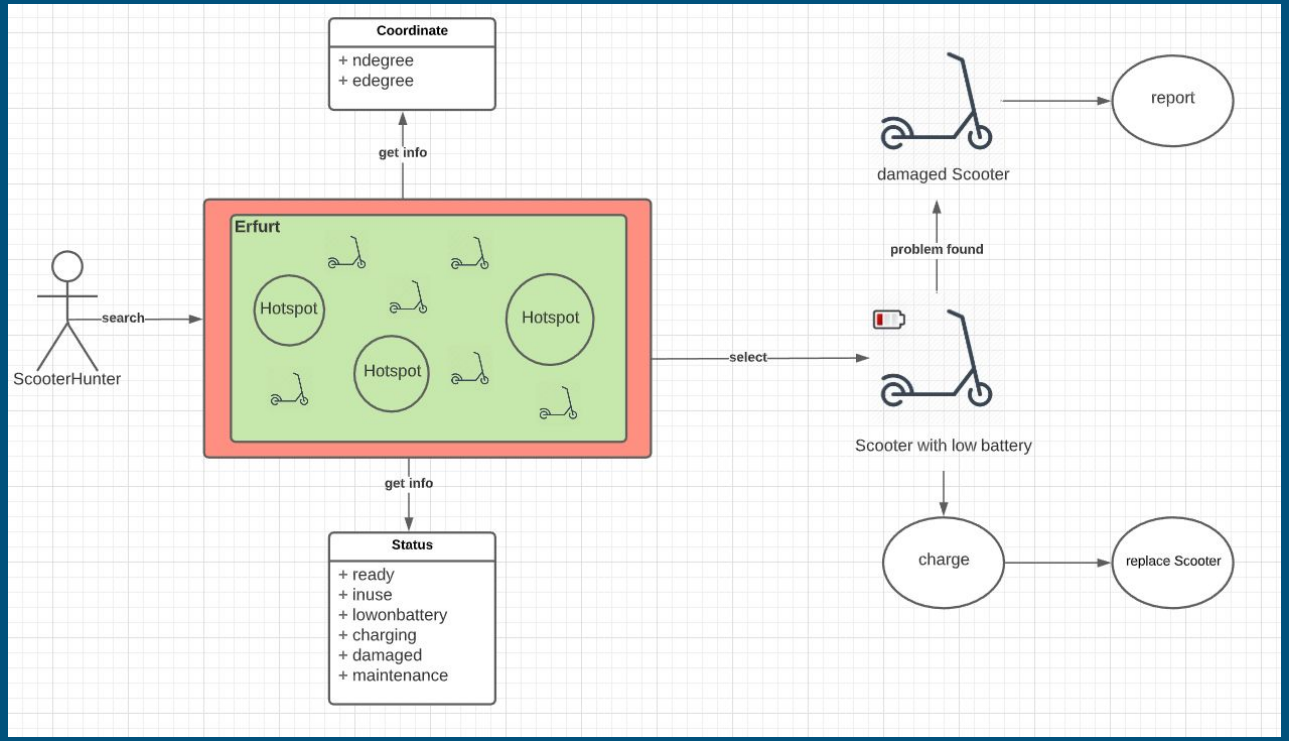

ScooterHunter
Methods
chargeScooter(Scooter) : void
inspectScooter(Scooter) : void
cashOut(float): void
Scooter
Constructor
(id ,position ,registeredarea ,licenseplate)
Getter
getId() : int
getState() : status
getBatteryInfo() : int
getPosition() : coordinate
getRegisteredArea() : area
getNumberOfScooters() : int
getLicensePlate() : string
Setter
setState(status)
setPosition(coordinate)
setRegisteredArea(area)
Methods
drive() : void
charge() : void
private data
int id
status state
int battery
coordinate position
area registeredarea
int numberofscooter
string licenseplate
Customer
Constructor
(username, password)
Getter
getPosition() : coordinate
getCreditedEuros() : float
Setter
setPosition(coordinate)
setCreditedEuros(creditedeuros)
Methods
returnNearestScooter() : Scooter
private data
string username
string password
float creditedeuros
coordinate position
ScooterHotspot
Constructor
(hotspotname, location, maxscootercount)
Getter
getHotSpotName() : string
getLocation() : coordinate
getMaxScooterCount() : int
getScooterCount() : int
Setter
setHotSpotName(string) : void
setLocation(coordinate) : void
setMaxScooterCount(int) : void
setScooterCount(int) : void
Methods
private data
string hotspotname
coordinate location
int maxscootercount
int scootercount
Area
Constructor
(areaname, 4*float)
Getter
getAreaInfo() : string
Setter
setAreaCoordinates(4*float)
Methods
isInArea(coordinate) : bool
private data
string areaname
float ndegree1
float ndegree2
float edegree1
float edegree2
Status
ready
lowonbattery
inuse
charging
damaged
maintenance
Coordinate
Constructor
(ndegree, edegree)
float ndegree
float edegree

Scooter Area mit Hotspots



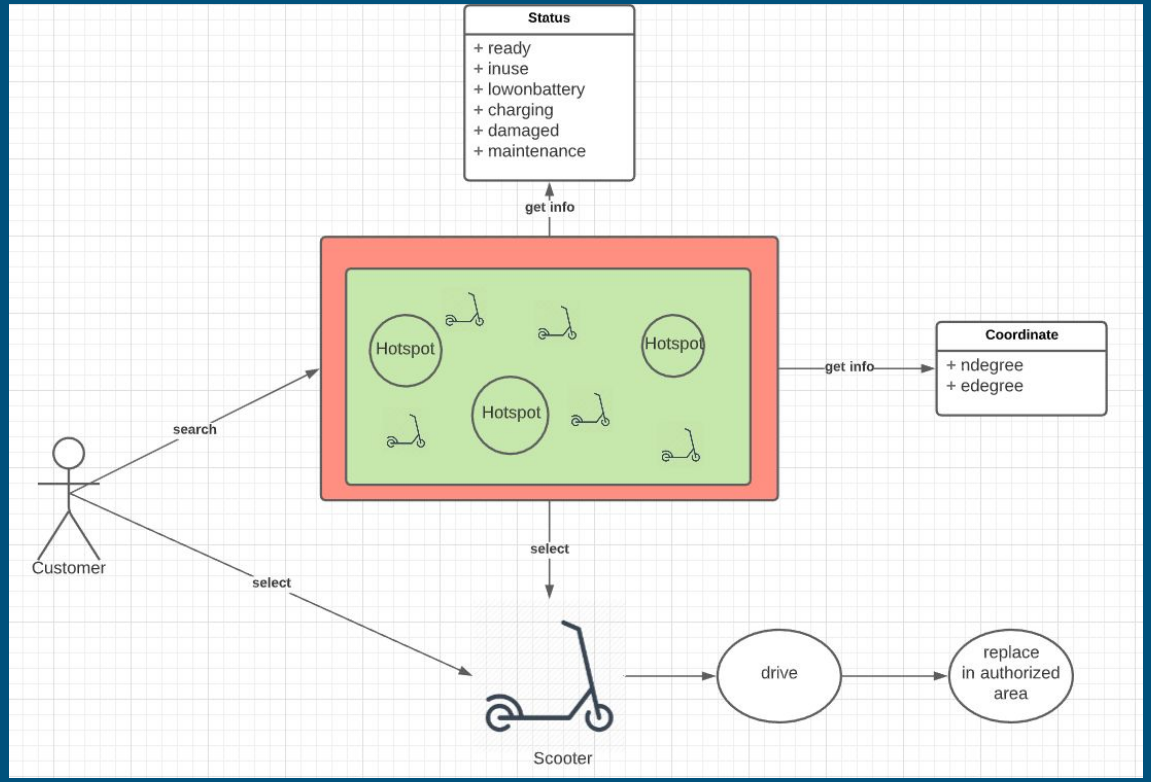
https://scribblemaps.com

Scooter Hunter



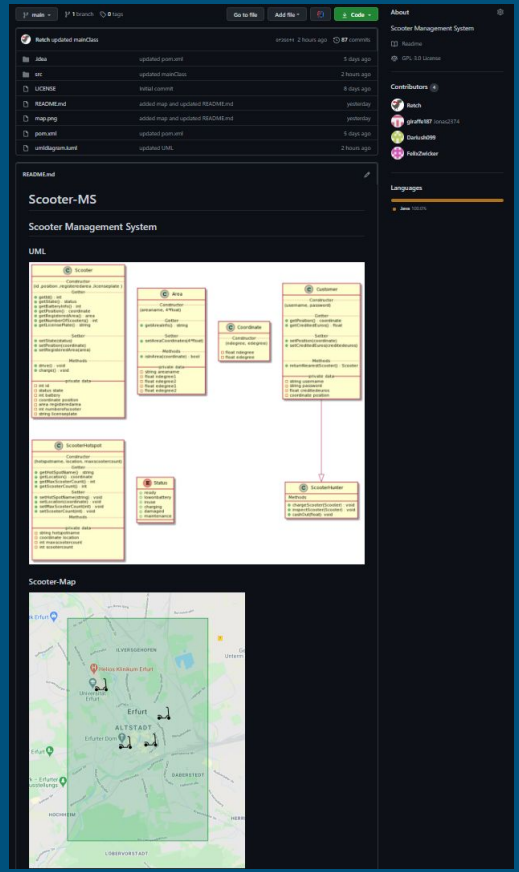
https://external-content.duckduckgo.com/iu/?u=https%3A%2F%2Fwww.eastbaytimes.com%2Fwp-content%2Fuploads%2F2018%2F07%2FSJM-L-JUICERS-XXXX-20.jpg&f=1&nofb=1

Customer



https://www.brisbanetimes.com.au/politics/queensland/fractures-and-head-injuries-scooter-crashes-becoming-a-regular-occurrence-20190120-p50shv.html

Code


main
1 branch
0 tags
Go to file
Add file
Code
flutch updated mainClass
Jdea
updated pom.xml
5 days ago
src
updated mainClass
2 hours ago
LICENSE
Initial commit
8 days ago
README.md
added map and updated README.md
yesterday
map.png
added map and updated README.md
yesterday
pom.xml
updated pom.xml
6 days ago
umldiagram.tuml
updated UML
2 hours ago
README.md
Scooter-MS
Scooter Management System
UML
Scooter-Map
About
Scooter Management System
Readme
GPL-3.0 License
Contributors
flutch
giraffe187
Darkuki099
FelixZwicker
Languages
Java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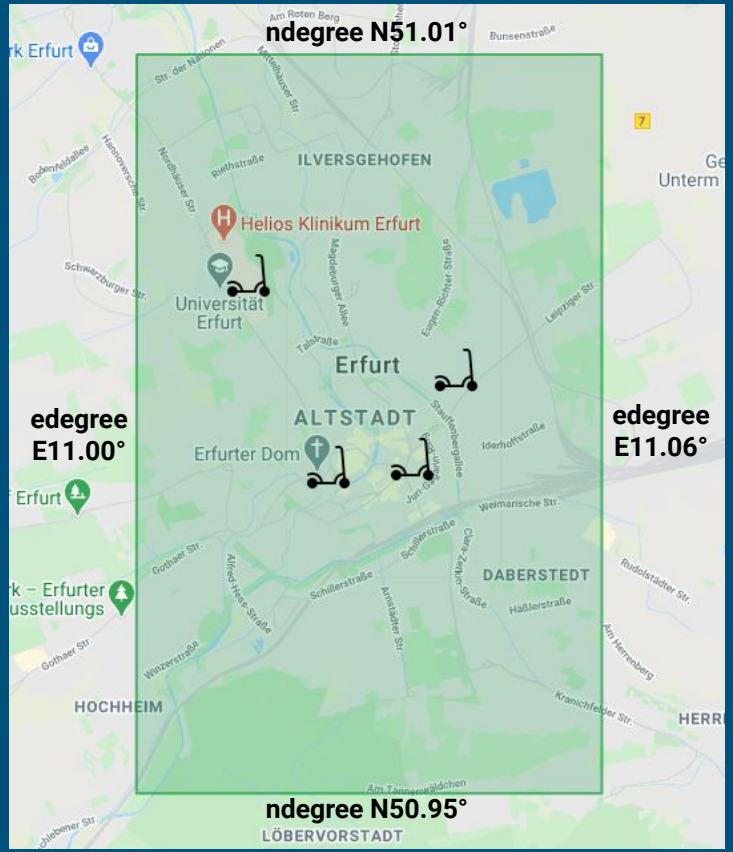
Code

```java
package de.teamshrug.scooterms;

public class Area {

    public Area(String _areaname, float _ndegree1, float _ndegree2, float _edegree1, float _edegree2) {
        this.areaname = _areaname;
        this.ndegree1 = _ndegree1;
        this.ndegree2 = _ndegree2;
        this.edegree1 = _edegree1;
        this.edegree2 = _edegree2;
    }

    public boolean isInArea(Coordinate _position)
    {
        if (((ndegree1 < _position.ndegree) && (_position.ndegree < ndegree2)) || ((ndegree1 > _position.ndegree) && (_position.ndegree > ndegree2)))
        {
            if (((edegree1 < _position.edegree) && (_position.edegree < edegree2)) || ((edegree1 > _position.edegree) && (_position.edegree > edegree2)))
            {
                return true;
            }
            else
                return false;
        }
        else
            return false;
    }

    public String getAreaInfo()
    {
        return areaname + ": N" + ndegree1 + "° - N" + ndegree2 + "°  &  E" + edegree1 + "° - E" + edegree2 + "°";
    }

    private final String areaname;
    private final float ndegree1;
    private final float ndegree2;
    private final float edegree1;
    private final float edegree2;
}
```

erster Test




```java
package de.teamshrug.scooterms;

import org.junit.jupiter.api.Test;
import static org.junit.jupiter.api.Assertions.*;



public class AreaTest {

    @Test
    public void isInAreaTest()
    {
        Area TestArea = new Area( _areaname: "TestArea", _ndegree1: 50.94f, _ndegree2: 51.11f, _edegree1: 10.98f, _edegree2: 11.04f);
        Coordinate TestPositionInArea = new Coordinate( _ndegree: 50.9789066f, _edegree: 11.029587f);

        assertTrue(TestArea.isInArea(TestPositionInArea), message: "If ndegree is between ndegree1 and ndegree2 (same for edegree), the scooter is in the area");
    }
}
```

weiteres Vorgehen

- Methoden verfeinern
- Klassen erweitern
- Tests schreiben

Danke für eure Aufmerksamkeit