

INSTRUCCTIONS STREET-VIEW-TRACTOR

StreetviewExtractor

Command line tool to extract street view images along a route between two locations.

Variation of the open code <https://github.com/jonhare/StreetviewExtractor>

##Compiling

You need Apache Maven. From a terminal run 'mvn package shade:shade' to build an executable jar.

##Usage

You will need a Google API key - get one here: <https://console.developers.google.com>.

You'll need to enable the "Directions API" and "Street View Image API".

Run the program with `java -jar target/StreetviewExtractor-1.0-SNAPSHOT.jar`

Usage: java -jar StreetviewExtractor.jar [parameters...]

Mandatory parameters:

--api-key (-a) VAL: Google API Key (enabled for Directions and Street View Images).

--from VAL: From coordinates formatted as lat,lng.

--to VAL: To coordinates formatted as lat,lng.

--output (-o) VAL: Output geojson file; the .json extension will be added if it's not present.

Optional parameters:

--fpx N: Number of images per X. If --time-recode is enabled X is seconds; otherwise it is meters.

--time-recode: Recode the path based on the time of each segment; the images will be further apart when moving faster.

--height (-h) N: Image height.

--width (-w) N: Image width.

--write-images (-i): Output the images of the route.

--write-video (-v): Output a video of the route.

--heading VAL: Direction of the taken image in a point.

--head: if activated, the direction of the taken image points towards the next point of the route, plus the heading value. if the heading value is not specified the direction points just towards the next point of the route.

--fov VAL: Field of view of the image (zoom).

--pitch VAL: Angle up or down of the camera in relation to the Street View vehicle.

--mode VAL: Mode of transport used on the route.

Example:

```
java -jar target/StreetviewExtractor-1.0-SNAPSHOT.jar --from 41.388520,2.171659 --to 41.385920,2.170060 -i -o test.json -a <your_API_key> --head --fov 100 --pitch 10 --mode WALKING
```

Output

The outputs, that will be placed in the file “target” are :

- Geojson file with information of the rute.
- File with the images along the rute named:
<OutputValue>_<ModeRoute>_+<HeadingValue>_<PitchValue>_<FovValue>-jpegs

The images inside this file are named:

<num_image>_<longitude>_<latitude>_<HeadingValue>_<PitchValue>_<FovValue>.jpeg

CODE AUTOMATION

test.py

To automate the code there is another code called test.py (placed in “\target” dir). This code extracts the images of the routes with different parameters automatically. You only have to choose the route and and run the program. The outputs will be places in “\target\bd\”.