README.md

# version 1.0.0b2

# Description

Mapmaker is a python module which provides functionality to generate neccessary images used in SKAT webportal for ejendomsvurderinger.

Mapmaker can write image files to local filesystem or AWS s3 buckets

The module incldues a CLI tool and can be used as a AWS Lambda function.

# Installation

Install locally with

```
pip install
```

# Usage

## Terminal

```
pdg-cli complete --help
Usage: pdg-cli complete [OPTIONS]

  Option to generate all images/maps

  input json must come from STDIN

  Examples:

  cat 387068.json | pdg-cli complete  --conf config.ini --s3

  sed '4q;d' huge_ndjson.json | pdg-cli complete  --conf config.ini --s3

Options:
  -c, --conf PATH      configfile in .ini format  [required]
  --s3 / --no-s3
  -v, --verbosity LVL  Either CRITICAL, ERROR, WARNING, INFO or DEBUG
  --help               Show this message and exit.
```

## AWS lambda

### Create package with dependencies

```
./make_lambda_package.sh
```

**Deploy**

```
aws lambda create-function --environment Variables="{LOGLEVEL=INFO,BUCKET=pgvdata}" --timeout 900 --function-name pgvm
```

LOGLEVEL valid values: ERROR,INFO,DEBUG,WARNING

Note: Role needs permission to write to s3 bucket

**Update**

```
aws lambda update-function-code --function-name pgvmaps  --zip-file fileb://function.zip
```

Invoke

with vurderingsejendom 387068

```
./invoke.sh
```

with vurderingsejendom 480470 (contain incomplete json for distance to coast)

```
invoke_incomplete_input.sh
```

**with AWS SQS**

```
aws lambda create-function --environment Variables="{LOGLEVEL=INFO,BUCKET=pgvdata}" --timeout 45 --function-name pgvma
```

NOTE: Different handler name "handler.lambda_handler_sqs"

**Attach SQS queue to Lambda function (Event source mapping)**

#aws lambda create-event-source-mapping --function-name ProcessSQSRecord --batch-size 10 --event-source SQS-queue-arn

```
aws lambda create-event-source-mapping --function-name pgvmaps_sqs  --batch-size 10 --event-sourcearn:aws:sqs:eu-centr
```

Note: SQS message queue needs to have Default Visibility Timeout set to longer or equal to Lambda function timeout for the whole batch (lamdaba timeout*batch size)

Output:

```
{
    "UUID": "faa0159d-e7ea-47b5-abe1-52e513d35dc5",
    "StateTransitionReason": "USER_INITIATED",
    "LastModified": 1559552543.917,
    "BatchSize": 10,
    "State": "Creating",
    "FunctionArn": "arn:aws:lambda:eu-central-1:478520491926:function:pgvmaps_sqs",
    "EventSourceArn": "arn:aws:sqs:eu-central-1:478520491926:pgvdata"
}
```

List event source mappings

```
aws lambda list-event-source-mappings --function-name pgvmaps_sqs  --event-source arn:aws:sqs:eu-central-1:47852049192
```

Output:


```
{
    "EventSourceMappings": [
        {
            "UUID": "faa0159d-e7ea-47b5-abe1-52e513d35dc5",
            "StateTransitionReason": "USER_INITIATED",
            "LastModified": 1559552543.917,
            "BatchSize": 10,
            "EventSourceArn": "arn:aws:sqs:eu-central-1:478520491926:pgvdata",
            "FunctionArn": "arn:aws:lambda:eu-central-1:478520491926:function:pgvmaps_sqs",
            "State": "Enabled"
        }
    ]
}
```


## Config file

```
[aerial-hero]
enabled = True
baseurl=  https://services.kortforsyningen.dk/service?SERVICENAME=orto_foraar&TOKEN=da0acd1a82cd4424b618118f030c4131
layers = orto_foraar
format = jpg
destination = /home/mbj/Documents/pdg
dirname = aerial-hero
bucket = pgvdata
sizes = [440,300,1024,400,1440,550,1920,550]
res = 0.4
padding = 0.1
has_ref_ejendomme = False
has_cap_infrastructure = False

[special-reference-properties]
enabled = True
baseurl=  https://services.kortforsyningen.dk/service?SERVICENAME=topo_skaermkort_pgv&TOKEN=da0acd1a82cd4424b618118f03
layers = dtk_skaermkort_pgv
format = png
destination = /home/mbj/Documents/pdg
dirname = special-reference-properties
bucket = pgvdata
sizes = [440,300,1024,400,1440,550,1920,550]
#sizes = [440,300]
res = 0.4
padding = 0.1
has_ref_ejendomme = True
has_cap_infrastructure = False

[special-distance-to-nature-thumb]
enabled = True
baseurl=  https://services.kortforsyningen.dk/service?SERVICENAME=topo_skaermkort_pgv&TOKEN=da0acd1a82cd4424b618118f03
layers = dtk_skaermkort_pgv
format = png
destination = /home/mbj/Documents/pdg
bucket = pgvdata
dirname = special-distance-to-nature-thumb
sizes = [300,150]
res = 0.4F
padding =F
has_ref_eF
has_cap_iF

[special-distance-to-infrastructure-thumb]
```

```
enabled = True
baseurl=  https://services.kortforsyningen.dk/service?SERVICENAME=topo_skaermkort_pgv&TOKEN=da0acd1a82cd4424b618118f03
layers = dtk_skaermkort_pgv
format = png
destination = /home/mbj/Documents/pdg
dirname = special-distance-to-infrastructure-thumb
bucket = pgvdata
sizes = [300,150]
res = 0.4
padding = 0.1
has_ref_ejendomme = False
has_cap_infrastructure = True
```