Project Report Presentation

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Introduction

Application of artificial intelligence methods for route planning on multilayered maps

Project Outline

- Project aims to enhance an application using neural networks for estimating accessibility scores using satellite imagery.
- Understanding Docker environments, MapServer installation and syntax for MapServer CGI.
- Future steps include breaking down images and training a CNN for predicting accessibility scores.

Challenges Faced

- Docker container setup and MapServer installation.
- Parameter and syntax understanding for MapServer CGI.
- Issues with default "browse" mode; solution with "map" mode.

##Example Docker Run call

```
docker run -d -t --name <msdock> -v .:/u02 -u:<uid>:<gid> -p <port>:80 mapserver/mapserver:<tag>
```

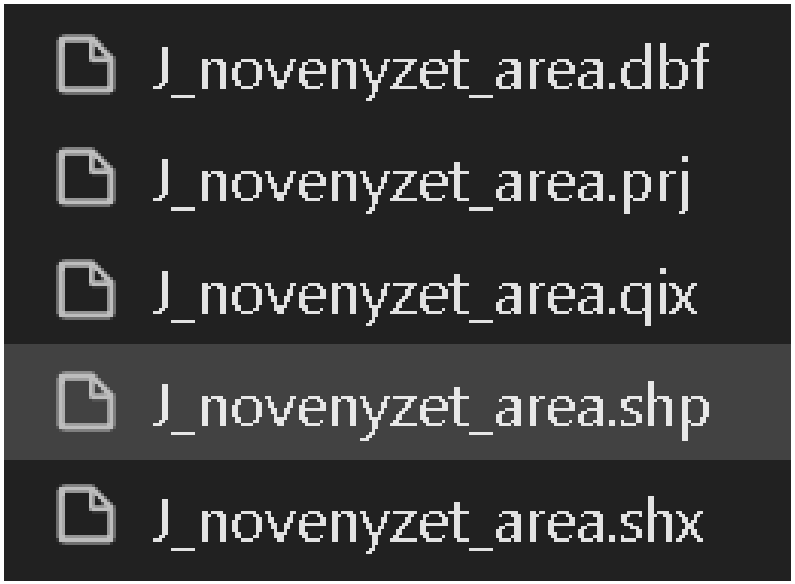
README.md

mapserver-docker

Conda based mapserver docker file with ironbank based base image

Progress So Far

- Understanding the working environment in a Docker container.
- Use of MapServer for visualization; problems and solutions.
- Displaying maps and exploring layers.




```
190   LAYER
191     COMPOSITE
192       COMPOP "lighten"
193     END # COMPOSITE
194     DATA "J_novenyzet_area.shp"
195     FILTER "100776"
196     FILTERITEM "MSLINK"
197     MAXSCALEDENOM 300000
198     METADATA
199       "ccm_conditions"  "400"
200       "ccm_validconditions" "100,300,400,501,502,503,504,505,506,507"
201       "ccm_layer_[layer_020]"   "1"
202       "ccm_layer_400"   "401"
203       "ccm_layer_[layer_000]"   "MS_COMPOP_LIGHTEN"
204       "fname"   "Szálerdő, ritka szálerdő (100776)"
205       "ccm_layer_[layer_010]"   "20"
206       "ccm_layer_[layer_400]"   "403"
207     END # METADATA
```

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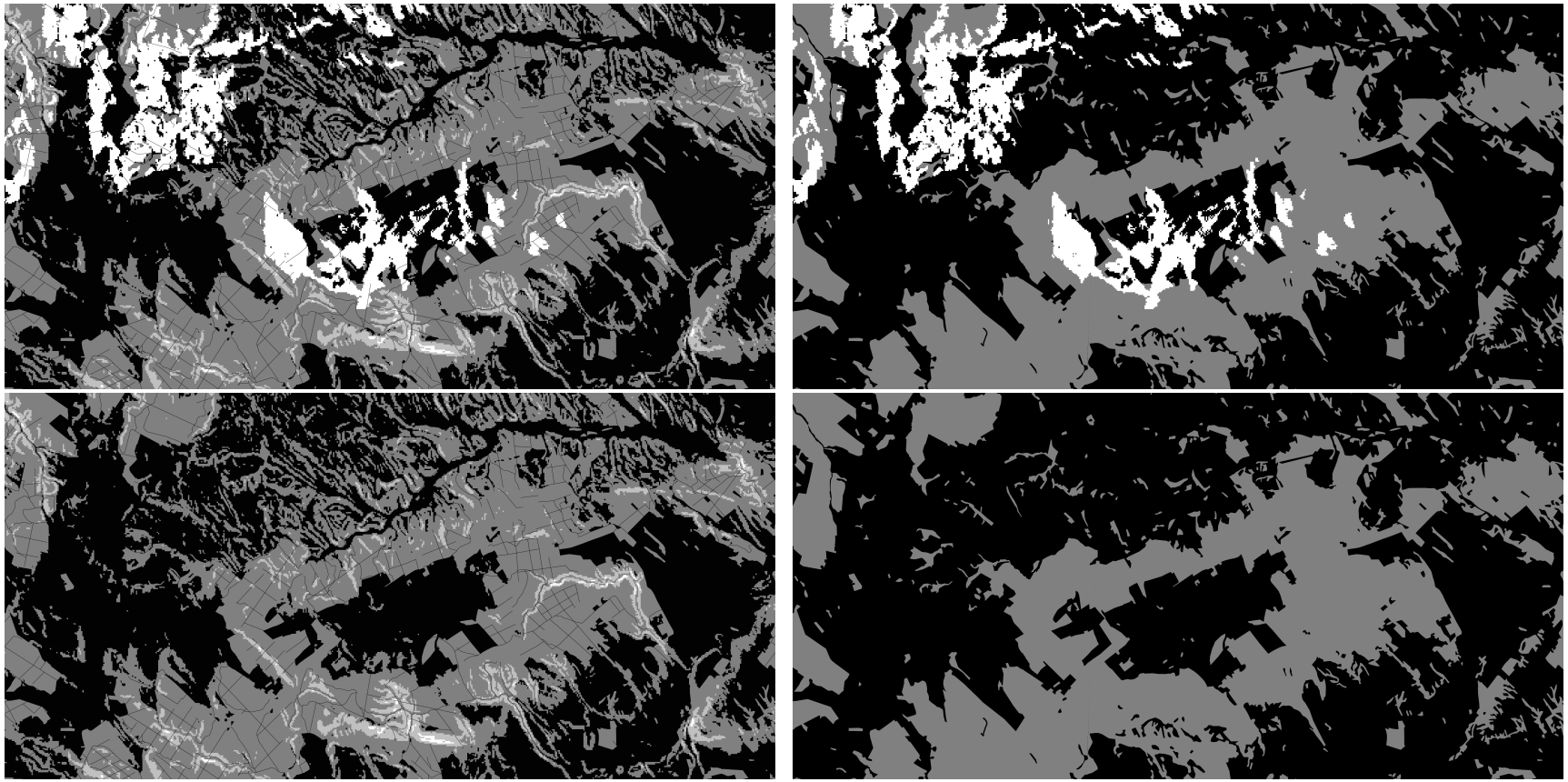
```
420     CLASS
421       EXPRESSION (401=402)
422       STYLE
423         COLOR 255 255 255
424         WIDTH 10
425       END # STYLE
426     END # CLASS
```

Some Maps With Layers



What Can Be Done Next?

- Break down saved images into smaller areas.
- Utilize satellite imagery and train a Convolutional Neural Network (CNN).

Thank You for Your Attention!