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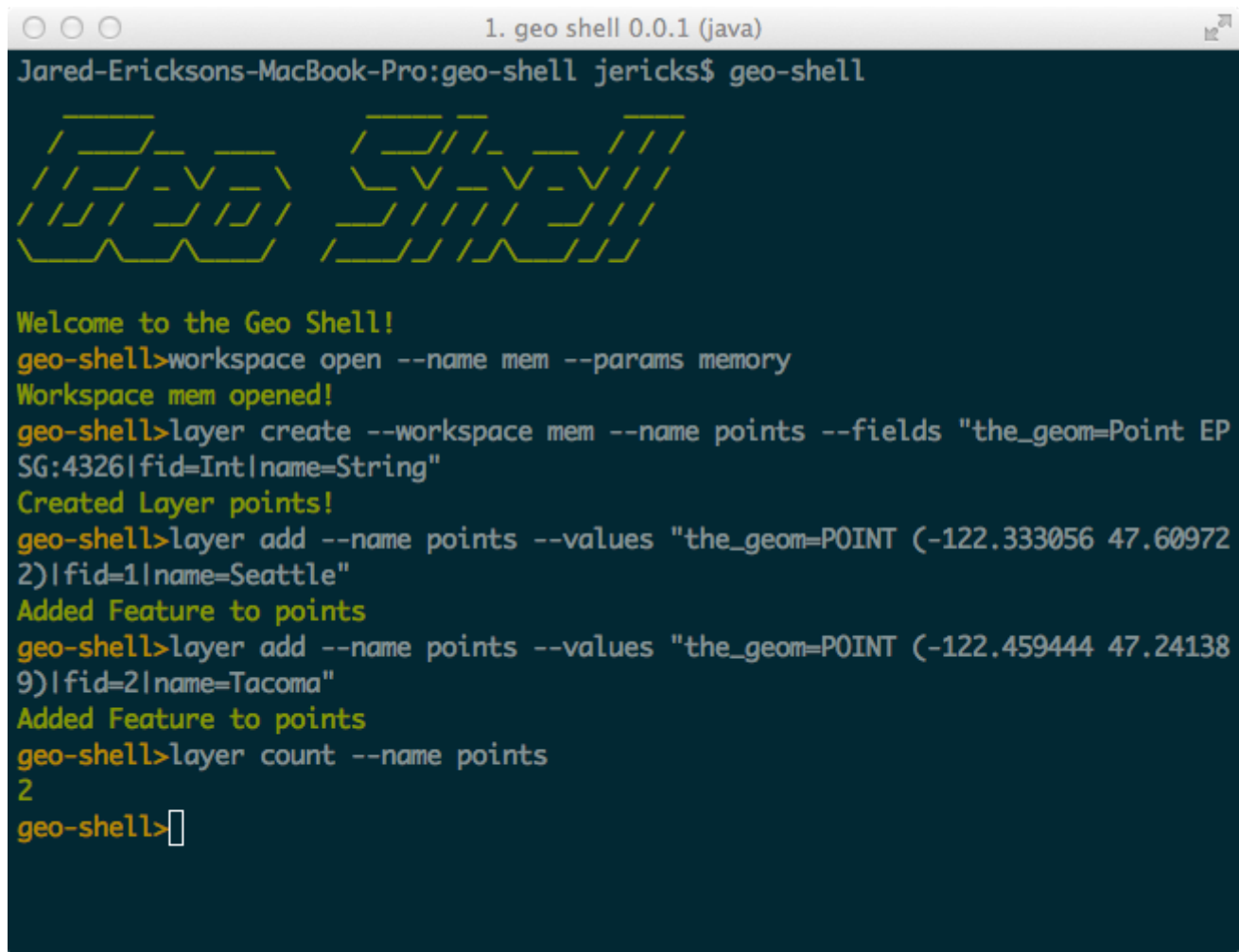
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# Introduction

Geo Shell is an interactive shell for geospatial analysis.

A screenshot of a terminal window titled "1. geo shell 0.0.1 (java)". The terminal shows the command "geo-shell" being executed, which displays a welcome message and a series of yellow geometric patterns. Subsequent commands include "workspace open --name mem --params memory", "layer create --workspace mem --name points --fields 'the\_geom=Point EPSG:4326|fid=Int|name=String'", "layer add --name points --values 'the\_geom=POINT (-122.333056 47.60972 2)|fid=1|name=Seattle'", and "layer add --name points --values 'the\_geom=POINT (-122.459444 47.24138 9)|fid=2|name=Tacoma'", followed by "layer count --name points" which returns "2". The prompt "geo-shell>" is shown at the bottom.

```
1. geo shell 0.0.1 (java)
Jared-Ericksons-MacBook-Pro:geo-shell jericks$ geo-shell

Welcome to the Geo Shell!
geo-shell>workspace open --name mem --params memory
Workspace mem opened!
geo-shell>layer create --workspace mem --name points --fields "the_geom=Point EPSG:4326|fid=Int|name=String"
Created Layer points!
geo-shell>layer add --name points --values "the_geom=POINT (-122.333056 47.60972 2)|fid=1|name=Seattle"
Added Feature to points
geo-shell>layer add --name points --values "the_geom=POINT (-122.459444 47.24138 9)|fid=2|name=Tacoma"
Added Feature to points
geo-shell>layer count --name points
2
geo-shell>
```

## Modules

Geo Shell has modules for dealing with **vectors**, **rasters**, **tiles**, **maps**, and **styles**.

For **vector** layers, you can use **workspace** commands access layers of spatial data in datasets like shapefiles, geopackages, or postgis databases. With **layer** commands you can perform geoprocessing functions like calculating centroids or buffer features.

For **raster** layers, you can use **format** commands access individual rasters from geotifs or world images. With **raster** commands you can perform mosaic, raster algebra, or crop functions.

The **tile** commands let you create tile layers, get tiles, and get rasters from tiles.

The **style** commands let you create styles for vector layers and raster.

The **map** commands allow you to visualize vector, raster, and tile layers.

# Use

You can use geo-shell interactively by typing **geo-shell** at the command line.

Or you can write scripts and then execute them from the command line by typing **geo-shell --cmdfile script.txt**

Or by using the **script --file script.txt** command within a geo-shell session.