

Exercises for Spatial Databases and GIS

Sheet 8 (until 22.12.2017)

Exercise 1 (Application Programming)

Develop a Java/JDBC program that generates a SVG file for one parcel and all its buildings. The data is stored in a postgres database having the following schema:

```
building(bid: integer, function: integer,
         groundplan: polygon)
```

```
parcel(pid: integer, groundplan: polygon,
        firstname: string, lastname: string)
```

Colours:

building, function 1000: #949694

building, function 2000: #cccecc

parcel: #fceaf4

border points: radius =150

text: font-size="2000" fill= "#000000"

Position relative to the parcel's MBR:
x+100, y+3000

SVG document prolog:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE svg PUBLIC "-//W3C//DTD SVG 1.1//EN"
  "http://www.w3.org/Graphics/SVG/1.1/DTD/svg11.dtd">
<svg width= "30.0cm" height= "20cm"
  viewBox= "x y w h" xmlns:xlink= "http://www.w3.org/1999/xlink">
```

x y w h have to be derived from the parcel's MBR.

x,y are the coordinates of the top left point,
w is the width und h the height + 5000

stroke-width: 50

In PostgreSQL 8.3 you have to write „geom1<@geom2“ instead of „INSIDE(geom1,geom2)“.

