An Introduction

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By Christian Hill

What is QGIS?

• Open source GIS

• Display and manipulate spatial data

• Create maps and perform analysis

What is spatial data?

Any data with a geographic component
Comes in many formats
Can be viewed and interpreted by QGIS

Your spatial data

- Maps are only as strong as their data
- Find reliable sources
- Data should be trusted before displayed
- Can't find your data online? Create it
- GPS data collection

Data Management

• Important to have a clean workspace

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	Dog Parks.cpg	12:42 AM	5 bytes	Document
All My Files	Dog Parks.dbf	12:42 AM	6 KB	Document
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Downloads	📄 Dog Parks.qpj	12:42 AM	640 bytes	Document
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	Dog Parks.shx	12:42 AM	380 bytes	Document
Desktop	QGIS files	12:20 AM		Folder
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Lets find some data

http://data.vancouver.ca/datacatalogue/index. htm - download the following datasets in SHP format:

City boundary
 Local area boundary
 Dog off leash parks

Add your data to QGIS

Three ways to do this:

- 1. Drag and drop
- 2. Layer -> Add Layer -> Add Vector Layer
- 3. Add vector layer button \vee_{a}

Order your layers

Drag and drop the layers so they are in the following order:



note: colours are chosen randomly when adding new data (yours may look different)

Inspect and change your data

Style your data (properties - > style)
 Look at the attribute table (right click)

Centroids

- Make points from your polygons
- Vector ->Geometry Tools -> Polygon
 Centroids
- add result to canvas (save in your data folder)

Points in Polygon

Use this tool to count the number of points in one layer, that are fully within the confines of a polygon in another layer.

 Vector -> Analysis Tools -> Points in Polygon
 Rename the field from "PNTCNT" (point count) to "PPN" (Parks Per Neighbourhood)

Categorized Style

Style your new neighbourhoods layer to show the different "categories" of park numbers that exist. ex, white to represent neighbourhoods with zero dog parks.

Pick an appropriate colour ramp.Label your features

Print Composer

Project -> New Print Composer

Add new map Add legend, title, scale, etc. Export as PDF or IMG