Introduction to GIS

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Session 6

Introduction to GIS

Course wrap-up

Today's plan

1. Session 5 recap
2. Tutorial debriefing
3. Coursework Q&A
4. Introduction to Tutorial 6

Session 5 Recap
&
Tutorial Debriefing

Session 5 learning objectives

After Session 5, you should now understand:

- What geoprocessing tools are
- Where to find them
- How to use the main vector geoprocessing tools (clip, intersect, dissolve, merge, difference, buffer)
- Common use cases for these tools

Session 5 tutorial

After the tutorial, you should be able to:

- Build a choropleth (and define relevant class breaks)
- Run simple geoprocessing tools
- Adding map layout elements (legend, title, etc.) using the Print Layout Composer
- Export a map as an image, PDF or SVG vector

Questions on the tutorial ?

Coursework

Questions on the final coursework ?

Final Coursework: Marking Criteria

The marking criteria reflect the learning outcomes expected at the end of this module. Students should be able to:

- Formulate a research question suitable for GIS analysis
- Source relevant data and assess their relevance based on the metadata provided
- Load and style data using appropriate symbology
- Ensure balance and accessibility of their map (colour-blind safe, etc)
- Produce a proper map export, complete with all key cartographic elements (title, legend, north arrow etc.)
- Provide a detailed methodology section, focusing on key decisions (choice of dataset, geoprocessing steps or class breaks chosen for a choropleth, etc.)
- Draw policy insights from their maps and translate those into applicable policy recommendations **or** future research outlooks. Please be very explicit!

Final Coursework: Marking Criteria

Criteria:

- Research question and whether your methodology adequately addresses it (20%)
- Methodology and choice of relevant datasets (20%)
- Quality of the map outputs (40%)
- Relevance of recommendations / Insights (10%)
- Overall quality of the writing, structure and visual clarity of the report (10%)

Final tutorial

Understanding flood risk exposure in the Greater London Metropolitan Area

Intro to GIS - Tutorial 6

In the Greater London metropolitan area, which local areas are the most likely to get flooded?

What are the demographic characteristics of these areas (age, education, employment status, ethnicity, etc.)?

Visual exercise (not a full analytical exercise)

Data Sources

Please download the data from the [geopackage](); it contains the following layers:

- **Flood Risk Zones:** https://data.london.gov.uk/dataset/flood-risk-zones
- **Census data for London** https://data.london.gov.uk/dataset/lsoa-atlas It's a csv file (not geographic) and comes at the LSOA (Lower Super Output area) level…
- So we also need the **LSOA geographic boundaries** https://geoportal.statistics.gov.uk/datasets/lower-layer-super-output-areas-december-2011-boundaries-ew-bfe-1 This LSOA dataset is national so…
- We need the **Greater London boundaries** to only keep the LSOAs we need https://data.london.gov.uk/dataset/inner-and-outer-london-boundaries-london-plan-consultation-2009