


# Foundations (Pt. 2)

 Changes before 22/23

- ☐ Add Learning Outcomes for each week
- ☐ More focus on code re-use and simplicity.

## Overview

 Important

This week's Learning Outcomes are:

- 1.
- 2.
- 3.

This week we start to move beyond Code Camp. So although you should recognise many of the *parts* that we discuss, you'll see that we start to put them together in a new way.

## Preparation

### Code Camp

*All* students should complete/revisit Code Camp Notebooks 8–11.

**Note:** there is an issue with the GeoJSON tasks in Notebooks 8 and 9. We can discuss in the Class.

### Lectures

Come to class prepared to present:

| Video        | Presentation |
|--------------|--------------|
| Dictionaries | Slides       |
| LOs          | Notes        |
| DOLs to Data | Slides       |
| Functions    | Slides       |
| Packages     | Slides       |

## Readings

Come to class prepared to present:

- (Etherington 2016) DOI
- (Donoho 2017) DOI
- (Unwin 1980) DOI

## Activities

- Padlet: [Collaborative Agenda]
- Complete the short Moodle quiz associated with this week's activities.

## Practical

### Changes before 22/23

- ☐ Add Learning Outcomes for each week
- ☐ Standardise delivery by TAs where practicals are TA-led (e.g. FSDS): clearer guidance on how to take students through each week.
- ☐ Clearer articulation of difficulty levels/targets for components *within* each week's practicals.
- ☐ Make links between lecture and practical content explicit; ideally trace a question through the whole process (*e.g.* "If I wanted to know if and where blue plaques are clustered in London how would I find out?")

The practical can be downloaded from GitHub.

## References

- Donoho, D. 2017. “50 Years of Data Science.” *Journal of Computational and Graphical Statistics* 26 (4):745–66. [https://doi.org/10.1007/978-3-642-23430-9\\_71](https://doi.org/10.1007/978-3-642-23430-9_71).
- Etherington, Thomas R. 2016. “Teaching Introductory GIS Programming to Geographers Using an Open Source Python Approach.” *Journal of Geography in Higher Education* 40 (1). Taylor & Francis:117–30.
- Unwin, David. 1980. “Make Your Practicals Open-Ended.” *Journal of Geography in Higher Education* 4 (2). Taylor & Francis:39–42. <https://doi.org/10.1080/03098268008708772>.

