

## How to use these notes

Since you're reading this, I assume that you already know how to use a Jupyter notebook. So this section only describes the overall structure of the lecture notes and how to best navigate them.

The background folder contains information on all kinds of topics, e.g. sets, relations, graphs, and so on. You're not supposed to read those in sequence. Instead, they act as a reference. Each notebook that is not background material starts with a list of its prerequisites. Some notebooks (like this one) have no prerequisites and can be read by anybody as is. Others may list among their prerequisites something like the following:

- sets (operations, set-relations)

This means that you have to know about set operations like union and intersection, and the typical relations that can hold between sets (e.g. subset and superset). If you don't have the required background, you should go to the background material about sets and read the units on operations and set-relations. These units may themselves have prerequisites, so if you don't meet those either you have to start with those prerequisites first.

### **EXAMPLE 1.**

Georg Ferdinand Ludwig Philipp Cantor wants to read up on n-grams models. He picks the first unit and is happy to set that it has no prerequisites. But as the second unit is much more formal, it requires some knowledge of set theory and functions:

- set theory (operations, set-relations)
- functions (notation)

While Cantor got the first one down, he's a little rusty on his function notation. So he goes to the background section and checks out the unit on function notation. The unit also requires some set theory, but since Cantor is on top of that he can read the unit right away. Once he's done, he continues with the second unit on n-gram models.