Class 18: Stats and data science

Programming for VR I

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Visualizing climate change

- https://web.meteo.mcgill.ca/cmccray/climate-change-montreal-winter/
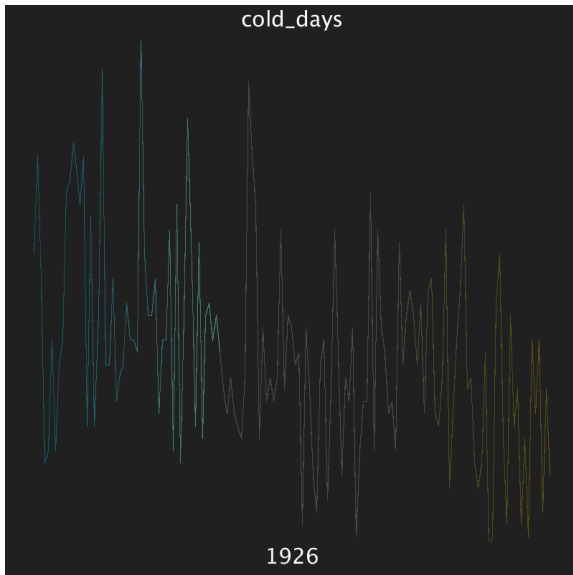
Demo project

Figure 1: Cold days as a function of time

Dicts

```python
a = {'abc': 10, 'def': 5}
a['ghij'] = "ok"
print(a['abc'])
>>> 5
print(a['ghij'])
>>> "ok"
```

Dicts

- A dict works a lot like a list: it can grow, shrink, contain heterogenous data in slots
- However: it doesn't have an order
- Instead, it has keys which can be strings (or ints but that's less common)
- You define them with curly brackets
- You can't append to a dict, you have to assign

What's a dict good for?

- ▶ Store a big quantity of data with meaningful names.
- ▶ `columns['snow_cm']`
- ▶ `columns['max_temp']`

Project: modify the visualization in some way

- ▶ Visualize the number of snow days with actual snow particles
- ▶ Download and visualize future climate data:
  https://climateatlas.ca/map/canada/plus30_2030_85#grid=300&z=
  82.53
- ▶ Display an iconic photo for each decade
- ▶ Display all of the current data simultaneously, with labels and
  colors