BITL1

Lab 9

8 March 2022

Introduction to Visualization

1. **Warm up:** Today's warm up is about Project 1 presentations from last week.
   (a) How did you assign grades to other students? What did you look for?
   (b) Click through the following links:
   - Gender equality in Latvia as measured by **knowledge** and **power**
   - Higher standards for women in **publishing**
   - Higher standards for women in **finance**

2. **Daily Python:** Inspect the data in the Colab notebook linked from ORTUS.
   Discuss with a partner:
   (a) the main impression you get from each plot
   (b) other ways to represent errors or a range in values

3. **Main task:** Today's task is about errors and averages.
   (a) Download the daily temperature file `lab9-rigatemperature.csv` from ORTUS and load it in Python (by using, for example, `pd.read_csv( ... )` from `pandas`).
   The data is a small part of the full set here: `kaggle.com`
   (b) **First plot:** Create a scatter plot of the temperature, with:
   - day of year on the horizontal axis
   - temperature in celsius on the vertical axis

   Make sure to choose an appropriate color scheme for the points.
   (c) **Second plot:** Create a line graph of the same data and axes, but use some visual representation of the possible range. Suggested options:
   - error bars (with or without caps)
   - lightly colored data in the background
   - lightly colored shape representing the range

   Submit the images of the plots on ORTUS.