**2020-02-14 Lab 1: Introduction to Python and Webscraping**

## 1. Objective:

The goal of the first lab is to familiarize yourself with the python3 syntax, gain insight in how to collect data from the web, use the pandas library and learn to use matplotlib for basic data visualizations.

The first lab you will work alone, later labs you will be assigned to a group and this pairing will be reshuffled at least once during the course.

## 2. Setup your Python environment

For most lab sessions we will use python3. For this (offline lab we will use **Anaconda** (https://www.anaconda.com/distribution/#download-section).

Anaconda conveniently installs Python, the Jupyter notebook and the most common packages for scientific computing and data science.

Follow the installation instructions for Python 3.7 compatible with your operating system.

For Linux a shell script will be downloaded which you need to execute, for Windows there will be a standard installer executable.

In Windows, after the installation start Anaconda Navigator and click on ‘Launch Jupyter’

This will open your browser at http://localhost:8888/tree

In Linux open a (new!) terminal and type:

**jupyter notebook**

This will also start Jupyter at <http://localhost:8888/tree>

Upload the notebooks from Ufora and you are all set.

## 3. (Optional) Lab: Introduction to Python

This is a practice lab, for some people who are familiar with python it's perfectly fine to skip it. Last year some people had trouble getting up to speed with python so we added this notebook. For other issues we recommend www.stackoverflow.com as your primary location to find help!

**Note**: this practice lab is optional so doesn’t have to be submitted!

## 4. Mandatory Lab: Introduction to Webscraping with Selenium

The instructions can be found in the notebook itself. Notebooks are a combination of Markdown and executable shells. In our opinion they are an interesting way to combine: code, documentation, visualization, testing,...

For every lab we expect you to upload a .zip file to the Ufora. This zip file contains a notebook file with your source code (.ipynb) and an export which we will use for the corrections (.html).

Use the following **Naming Convention**:

***LabXX\_firstnameLastName.zip***

For the other labs for which you will work in duos:

***LabXX\_firstnameLastName\_firstname2LastName2.zip***

The first lab is due on Wednesday February 26, 23:59:59