**Git**

1. What is Git and why we use it?
   * <https://en.wikipedia.org/wiki/Git>
   * Version control, collaboration (branches), backup
2. GitHub repository for this course
   * <https://github.com/wenceslasdk/data-science-2>
   * All students create a GitHub account
3. Git client with a nice GUI
   * <https://www.sourcetreeapp.com/>
   * Download and install Sourcetree
   * Need to install Git, Mercurial is not needed
   * Add account into Sourcetree
     + Tools -> Options -> Authentication -> Add
     + Select Github, click “Refresh OAuth Token” -> log in -> Authorize
4. Creating a fork of the repository
   * <https://docs.github.com/en/get-started/quickstart/fork-a-repo>
   * Add repository to Sourcetree
     + Remote -> GitHub account -> data-science-2 -> clone
     + Choose location -> clone
5. Keeping the fork updated
   * <https://docs.github.com/en/github/collaborating-with-pull-requests/working-with-forks/syncing-a-fork>
   * web UI “Fetch and Merge”
   * other option (“Configure a remote for a fork” using “Terminal” (git remote add upstream https://github.com/wenceslasdk/data-science-2.git), pull from upstream)
6. Create a branch

Practical examples:

1. Update changes from the upstream
   * Teacher to fill in the lines below, commit and push the changes

testing

Number of students present: 30

Weather outside: its dark, no idea

* + Students pull the changes
  + Merge into your branch

1. Make changes in your own repository
   * Students to fill the lines below, commit and push the changes

Year of study: 5

Number of lectures today: 2

In the remaining time or as homework until the next practical, download and install:

* PyCharm
  + <https://www.jetbrains.com/pycharm/>
  + IDE (Integrated Development Environment) for Python
* Anaconda
  + <https://www.anaconda.com/>
  + This will allow us to use Jupyter notebooks