



# Python Block Course

## Instructions

### Set Up Anaconda

To run Python code we will use Anaconda. The advantage of this platform is that it is very simple to install and it comes with a very useful interface called Jupyter Lab. All sessions and assignments will build on this interface.

#### Step 1:

Visit the website of **Anaconda** with the link below. Select your operating system, look for **Anaconda** in the **Python 3.7 Version**, download and install it.  
<https://www.anaconda.com/distribution/>

#### Step 2:

After you have completed the installation, search in your **Applications** for **Anaconda Navigator** and start it. In the tab **Home**, look for **Jupyter Lab** and launch it.

#### Step 3:

If everything worked out, you can now access your own **Jupyter Lab** via you **web browser**. By default, Anaconda will automatically open a **tab** with the corresponding page, otherwise it can be reached in most cases via the link below.  
<http://localhost:8888>

### Sign Up for GitHub

As with all large code projects, we also exchange code with Git. To do that we will use the code hosting platform GitHub. It offers a wide range of features, including consistent version control and change tracking. In this way, all materials will be made available to you and your completed assignments will be submitted back to us. You will get your own private repository to work in.

If you already have your own GitHub Account, you can skip the first step.

#### Step 1:

Visit the website of **GitHub** with the link below. Click on **Sign Up** and complete the registration process. We recommend that you either use your **university email address** directly or the **email address** you used to **register** for the **course** to avoid complications later on.  
<https://github.com/>

#### Step 2:

After you have logged in to your GitHub account, go to our **GitHub Classroom** with the link below. Authorize **GitHub Classroom**, follow the prompted instructions and accept the **assignment**. Note the **link** to your **new repository** for the next section.  
<https://classroom.github.com/a/ppoz8mBi>

## Set Up GitHub Desktop

There are several ways to use your GitHub repository. On the one hand, there is the command line where you use commands to perform the desired actions. On the other hand, there is GitHub Desktop which allows for most actions within a graphical user interface. The latter is often a relief, especially for beginners. With GitHub Desktop, you will need to *pull* new sessions and assignments, and *push* finished assignments, within your own private repository.

If you prefer to work with the command line, you may clone your private repository by yourself.

### Step 1:

Visit the website of **GitHub Desktop** with the link below. Select your operating system, download and install it.

<https://desktop.github.com/>

### Step 2:

After you have completed the installation, search in your **Applications** for **GitHub Desktop** and start it. At first you will need to sign in by clicking on **Sign In** to identify yourself with your **GitHub account**.

### Step 3:

Once you have signed in, you can access your private repository that you created in the previous section through GitHub Desktop. To work with it, click on **Clone a Repository**, **URL**, enter the **link** to your **private repository** and the **local path** where you want to work with it on your **computer**. If your clone worked out, you can now see the first files in your local path. These files should be the same as the ones online when you open up your private repository via your web browser.

## Additional Information

To get a first experience how to use Anaconda, Jupyter Lab, GitHub and GitHub Desktop, we recommend you to watch the following videos.

Getting Started With GitHub, Part 1: Creating a GitHub Account,  
<https://youtu.be/XBzUqQbHHhw>

Getting Started With GitHub, Part 2: GitHub Desktop,  
<https://youtu.be/ci3W1T88mzw>

Anaconda Installation Guide, <https://youtu.be/jhFyTv9vLi4>