Introduction for Mac Users

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Abstract

*This is a short introduction for mac users on how to install the LaTeX-distribution **mactex** and the LaTeX-editor **TexStudio** via **Homebrew**.*

Requirements

Before we can start with writing a documents some programs have to be installed. In order to do so a package manger like *Homebrew* can be used. In order to install Homebrew, open up your terminal (cmd + spacebar, and type in terminal) and paste this code into it:

```
/bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"
```

After the download has completed, follow the instructions which are presented in the terminal. There are two commands which have to run and after that *Homebrew* should work.

Packages

The following packages will be needed:

- MacTex
- TexStudio
- Git (if XCode is installed already, then Git should be installed as well.)

The following command must be pasted into the terminal, so that MacTex is installed:

```
brew install --cask mactex
```

After MacTex has been installed, the LaTeX-editor TexStudio can be installed with:

```
brew install --cask texstudio
```

If Git is not installed yet, then you can run the command:

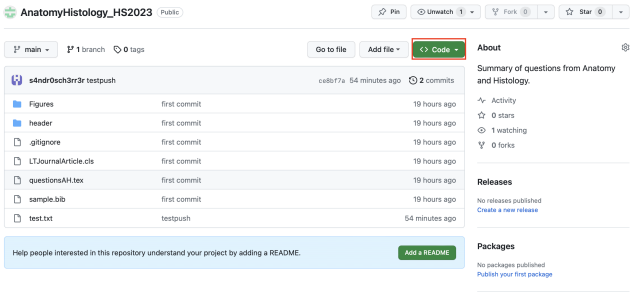
```
brew install git
```

Now, all required packages are installed.

Git basics

In order to use git, first create a GitHub account. You can sign up at Github.

After you have created a GitHub account, you can create an SSH key, so that you can push to repositories without providing your username and password. To create a SSH key watch this this video and follow the steps.



git clone

The first command which you will need is *git clone*. With *git clone* you can clone a repository. A repository is where all the code will be kept and where the updates will be added to.

So that you can clone a repository, search for green *Code* button and click on to the SSH tab and copy the link which you see. These links usually start with **git@github.com**...

After you have copied the link, create a folder in which the repository should be cloned into. In the terminal open this path of the folder and write the command or any other repository which you want to clone:

```
git clone git@github.com:BME-Students/AnatomyHistology_HS2023.git
```

After you have cloned the repository, you can make changes to the files. They, however, are not affected in the main repository. In order to add these changes to the repository you first have to use the command *git add* which will be described in the next section.

git add

In order to make changes to the repository on GitHub, you can add the files or also an individual file with the *git add* command. With this command you prepare a file to be commited to the repository.

With the command

```
git add \emph{filename.tex}
```

you can add a single file for committing and with

```
git add .
```

you add all files which have been changed.

git commit

With the following command

```
git commit -m "add your comment"
```

you commit the files. This means that the following changes will be pushed to the repository. With the *-m* you leave a comment in after the *"comment"*. Every commit also has a comment with a short description, what has been changed, e.g. "make changes to filename.tex" or "add images for documentation".

git push

With *git push* the changes are finally pushed to the repository and other people can now see your changes.