Workshop preparations

Please follow the instructions below. We will not have time on the workshop day to do this together. Though, in the beginning I will go through it briefly again. If you haven't prepared the below before the workshop day, you won't be able to do the exercises. If you have any troubles, please contact me asap.

1. Text Editor

Please make sure to have a simple Text Editor on your computer.
For Mac Users: Your Text editor should be able to save files in .txt format and not only in .rtf format.

2. Install Git

- https://git-scm.com/book/en/v2/Getting-Started-Installing-Git

- Installing guide for windows: https://medium.com/devops-with-valentine/2021-how-to-install-git-on-windows-10-step-by-step-guide-1c9db500e734

- Installing guide for Mac: https://www.youtube.com/watch?v=26hzQ6KWhDM

After installing Git, please run these commands one after another in your terminal (it doesn't matter in which directory you currently are) to check and complete your setup (you can just copy-paste the commands):

```
git --version
```

→ this tells you if the installation was successful by telling you the version number of git you installed.

```
git config --global user.name "Example Name"
```

→ put in your real name. You have to set the quotation marks around your name otherwise git can't read it.

```
git config --global user.email example@example.com
```

→ choose your university email which you use for the university GitLab service. This is important so that the synchronization of Git and GitLab runs without troubles.

```
git config --global init.defaultBranch main
```

→ this makes sure that your default branch is main, which is currently used by most users as their default branch. Don't worry about what it means, we will talk about that in the workshop ☺

```
git config --global core.editor ExampleEditor
```

→ this sets a default text editor when working with git. Just type in the editor you want to use. **My recommendation is to use nano**. You don't have to download anything, it's already on

your machine as it is a command-line editor. So, it's super convenient for working with git, as the git commands are also run in the command-line. For making nano your gloab git-editor type `git config --global core.editor nano`

```
git config --global pull.rebase false
git config --global pull.merge true
```

→ this makes sure that your merges are shown in the commit history

```
cat ~/.gitconfig
```

→ checks if your configuration was successful. It should give you this output:

[user] name = Your Name email = yourname@yourplace.org
[core] editor = YourEditor
[init] defaultBranch = main
[pull] rebase = false merge = true

For Mac Users:

Please run the two following commands so that the .DS_Store files are always ignored by Git. You don't need it ever and it just makes troubles.
First
`echo .DS_Store >> ~/.gitignore_global`

and then
`git config --global core.excludesfile ~/.gitignore_global`

2. Set up GitLab

You need an account for the GitLab of the University of Marburg. If you're a student or employee of Marburg university, you automatically have it by your normal students or staff account. If you're affiliated with the University in Gießen, your account needs to be activated. Most of the SFB135 and TAM people from Gießen already have access, but if you don't, please contact me asap.

1. Go to https://gitlab.uni-marburg.de/
2. Login with your university email. Type in your password and press your YubiKey so that it fills in your 2FA right next to your regular password. Only after doing this, click Sign in (check "keep me signed in" for your convenience).
3. **Set up a ssh key**
   a. read these instructions by GitLab https://gitlab.uni-marburg.de/help/user/ssh.md
   b. for Windows: https://www.youtube.com/watch?v=neAurRskPKQ&t=237s (until minute 3)
   c. for Mac: https://www.youtube.com/watch?v=_qDJ0W1wR5w (minute 6:10 to 11).

Please note that if you set a passphrase for your ssh key, you will have to type in this passphrase every time you interact with GitLab from your local repository. Hence, **I recommend not setting a passphrase for convenience during the workshop.** However, for the sake of completeness, a ssh key is actually only really secure if you give it a passphrase. We'll talk about ssh keys and another way to secure your communication in the workshop.

4. **Verify that you can connect:**

   To ensure you're connecting to the correct server, check the server's SSH host keys fingerprint. For:

   a. Open a terminal and run this command, replacing `gitlab.example.com` with your GitLab instance URL:

   ```
   ssh -T git@gitlab.uni-marburg.de
   ```

   b. If this is the first time you connect, you should verify the authenticity of the GitLab host. If you see a message like:

   ```
   The authenticity of host 'gitlab.example.com (35.231.145.151)' can't
   be established.
   ECDSA key fingerprint is
   SHA256:HbW3g8zUjNSksFbqTiUWPWg2Bq1x8xdGUrliXFzSnUw.
   Are you sure you want to continue connecting (yes/no)? yes
   Warning: Permanently added 'gitlab.example.com' (ECDSA) to the list
   of known hosts.
   ```

   Type `yes` and press `Enter`.

   c. Run the `ssh -T git@gitlab.uni-marburg.de` command again. You should receive a *Welcome to GitLab, @username!* message.
   d. If the welcome message doesn't appear, you can troubleshoot by running `ssh` in verbose mode:

   ```
   ssh git@gitlab.uni-marburg.de -vvv
   ```

   and send me the error message (if the error message is not helpful for you to solve the issue, but maybe you can solve it yourself!).

If you have troubles with setting up a ssh key, please contact your local IT support. If they can't help, you can also contact me.

3. Download example folder

Please download the folder "Party" on your laptop as we will work with these files during the workshop. For convenience, it's best to place the folder in an upper-level directory like home or the desktop.
I sent the folder in Slack, or you can download it here https://sfbs.pages.uni-marburg.de/sfb135/nowa/nowa.site/workshop/introduction-to-git-gitlab/

4. Troubleshooting: If you have any problems with any of the steps above, please contact me in Slack asap so we can meet before the workshop to figure it out together.