Intro to Git cheatsheet

The class that we are following can be found in https://clarallebot.github.io/git-novice/. These are the commands that we will use, for your reference if you don't want to have to go back and forth from the lesson to the command prompt to not get lost. The lesson has the explanations of what everything means.

1.Open the command line prompt:

For Mac:
Finder -> Utilities -> Terminal

For Windows:

Click Start [image] and find Git-> Git Bash

2. Setting up Git

```
$ git config --global user.name "Vlad Dracula"
$ git config --global user.email "vlad@tran.sylvan.ia"
$ git config --global color.ui "auto"
```

For Mac:
```
$ git config --global core.editor "nano -w"
```

For Windows:
```
$ git config --global core.editor "'c:/program files/Notepad++/notepad++.exe' -multiInst -notabbar -nosession -noPlugin"
```

```
$ git config --list
```

```
$ git config -h
$ git config --help
```

3. Edit files during this class

For Mac:
```
$ nano nameoffile.txt
```
A window will appear in the command line prompt. Make changes to the file.
Exit: Ctrl+X
Save: Answer yes (`Y)`) when prompted and `Return` to confirm the file name.

For Windows:
```
$ notepad nameoffile.txt
```
A window will open separately from the command line prompt. Make changes to the file. Save as usual.
You will need to close the window to be able to continue working in the command window.

If you want to keep the window open all the time, and be able to work from the prompt while it is open, open notepad from the Windows menu or from the command line prompt as:

```
$ notepad nameoffile.txt &
```

4. Creating a repository

```
$ mkdir planets
$ cd planets
$ git init
$ ls
$ ls -a
$ git status
```

5. Tracking changes

```
$ nano mars.txt
$ ls
$ cat mars.txt
$ git status
$ git add mars.txt
$ git status
$ git commit -m "Start notes on mars as a base"
$ git status
$ git log
$ nano mars.txt
$ git status
$ git diff
$ git commit -m "Add concerns about effects of Mars' moons on Wolfman"
$ git status
$ git add mars.txt
$ git commit -m "Add concerns about effects of Mars' moons on Wolfman"
$ nano mars.txt
$ git diff
$ git add mars.txt
$ git diff
$ git diff --staged
$ git commit -m "Discuss concerns about Mars' climate for Mummy"
$ git status
$ git log
```

6. Exploring history

```
$ nano mars.txt
$ git diff HEAD mars.txt
$ git diff HEAD~1 mars.txt
```

```
$ git diff HEAD~2 mars.txt
$ git diff f22b25e3233b4645dabd0d81e651fe074bd8e73b mars.txt
$ git diff f22b25e mars.txt
$ nano mars.txt
$ git checkout HEAD mars.txt
$ cat mars.txt
$ git checkout f22b25e mars.txt
```

7. Remotes in GitHub

```
$ git remote add origin https://github.com/vlad/planets.git
$ git remote -v
$ git push origin master
$ git pull origin master
```

8. Collaborating

The **collaborator** does:

```
$ git clone https://github.com/vlad/planets.git ~/Desktop/vlad-planets
$ cd ~/Desktop/vlad-planets
$ nano pluto.txt
$ git add pluto.txt
$ git commit -m "Some notes about Pluto"
$ git push origin master
$ git pull origin master
```

9 Conflicts

Owner

```
$ nano mars.txt
$ git add mars.txt
$ git commit -m "Adding a line in our home copy"
$ git push origin master
```

Collaborator:

```
$ nano mars.txt
$ git add mars.txt
$ git commit -m "Adding a line in my copy"
$ git push origin master
$ git pull origin master
$ git add mars.txt
```

```
$ git status
$ git commit -m "Merging changes from GitHub"
$ git push origin master
$ git pull origin master
```