

# Users and Groups

Every file has a **file owner**. This is just another **user account** on the system. Use **whoami** to check which account did you log into.

```
$ whoami
mateo
```

The **root** user is the main user account on the system with all of the permissions (like an administrator account). Since this account has unlimited capabilities, it is often recommended not to use it directly, so that we don't do something irreversible to the system. Instead, you can use the **sudo** command. When you prepend a command with **sudo** that means that you want to execute it as the **root** user. However, the requirement for using it is that your user account is a part of the **sudo** group.

**groups** command will list you all of the groups that you are a part of. All of the possible groups on the system can be seen in the **/etc/group** file.

To see the user ID and all of the user groups, you can also use the **id** command.

To create a new user we can use the **useradd** command. There is also a **adduser** command on most of the Linux systems, which is more beginner friendly. It will ask you for the finger information (information about the user). However in this course we will use the good old **useradd** option, which always and definitely works.

```
$ sudo useradd john -m -d /home/john -s /usr/bin/zsh
```

**m** options gives this user a home directory. **d** option will define where that directory will be created and its name.

**s** option defines the default login shell. If you don't know where the shell is

installed, use the **which** command followed by the name of the shell command. You can also edit the user configuration later with the **usermod** command. Set a login password on a user john with the **sudo passwd john** command. You can set a password expiration time with the **chage** command. All of the users passwords are stored in the hashed format, inside of the **/etc/shadow** file.

We can create groups with the **addgroup** and delete them with the **delgroup** command.

```
$ sudo usermod -aG sudo john
```

The command above will add the user john to the sudo group. You can add users to the group with the **usermod** command that has the **aG** options.

To login as another user, use the **su** command.

```
$ su - john
```

This will log you into the john user account. To logout you can use the **exit** command.

On macOS you can add users from the graphical interface. Go to the *System Preferences > Users & Groups* and from there you can add new users.