

Lab: (Sourcetree) References

Estimated time: 10 minutes

Note: This lab assumes that you are using Sourcetree. If you would prefer to use a command line interface, there are separate instructions.

Note: This lab assumes that you have created a local and remote repository named `projectb`. This was done in the previous two labs. If you do not have these, either create them now or go through the previous labs first.

In this lab, you will:

1. Create, push and view references of a commit.
2. Tag the commit.

1: Create, push and view references of a commit.

1. In your `projectb` working tree, create a file named `fileA.txt` containing the simple string "feature 1" (without the quotes).
2. Using Sourcetree, add `fileA.txt` to the staging area.
3. **Commit** this file to the local repository. Specify a commit message of "add feature 1". Notice that you have the option of pushing this commit to the remote repository by checking the "Push changes to origin/master" checkbox. You can check this if you want to, but often you might want to push the commit later, because in general you don't want to share commits unless you are sure that you won't want to change them.
4. If you did not select the "Push changes to origin/master" checkbox previously, **push** the commit to the remote repository.
5. View the commit on Bitbucket.
6. In Sourcetree, view the commit history. Notice that there are labels/references associated with the commit(s). Labels starting with "origin" are related to the remote repository. We will discuss those more later.
7. Click on the most recent commit in the history. View the commit details.
8. View the SHA-1 of the commit in the commit details. Notice that it is a 40 character hexadecimal string. View the same commit next to the commit graph. Notice that only the

first seven characters of the commit's SHA-1 are listed.

Congratulations, you have created, pushed and viewed the references of a commit.

2: Tag the commit.

1. Let's say that we want to "permanently" attach a version label to the commit that implements feature 1. In Sourcetree, right-click on the latest commit and select **Tag...** In the window that opens, your latest commit should be selected. Because we want to tag the latest commit, you could also select the "Working copy parent" option, since that represents the latest commit too.
2. Name the tag **v0.1**. You can select the "Push tag" checkbox if you want. This will push the tag to the remote repository when the tag is created. You also can push the tag later as a separate step.
3. Click **Add** to tag the commit. You should now see the v0.1 tag on the commit.
4. If you did not select the "Push tag" checkbox when creating the tag, push the tag now by right-clicking on your tag under the TAGS tab and selecting **Push to > origin**.
5. View the commit on Bitbucket. Notice that it has the v0.1 tag associated with it.
6. You will not use the `projectb` repository in future labs. Feel free to delete it using the procedure below. You can delete the remote and local repositories.
(Bitbucket) Delete the remote repository in Bitbucket by selecting `Settings` , `Delete Repository` and `Delete` .
(Sourcetree- Mac) In the main Sourcetree window, right-click on the repository name and select `Delete` .
(Sourcetree- Windows) In a new tab, right-click on the repository name and select `Delete` . Then select `Delete Repositories on Disk` . This removes the repository from Sourcetree and deletes the project folder.

Congratulations, you have created a tag and pushed it to the remote repository.