

# **Git Kata: Basic Staging**

This kata will examine the staging area of git.

In git we are working with three different areas:

- · The working directory where you are making your changes
- The staging area where all changes you have added through git add will stay
- The repository where every commit ends up, making your history. To put your staged changes in here you issue the git commit command.

A file can have changes both in the working directory and staging area at the same time. These changes do not have to be the same.

We will also work with git reset to reset the staged changes of a file, and git checkout to return a file to a previous state.

## Setup:

1. Run source setup.sh (or .\setup.ps1 in PowerShell)

### The task

You live in your own repository. There is a file called file.txt.

- 1. What's the content of file.txt?
- 2. Overwrite the content in file.txt: echo 2 > file.txt to change the state of your file in the working directory (or sc file.txt '2' in PowerShell)
- 3. What does git diff tell you?
- 4. What does git diff --staged tell you? why is this blank?
- 5. Run git add file.txt to stage your changes from the working directory.
- 6. What does git diff tell you?
- 7. What does git diff -- staged tell you?
- 8. Overwrite the content in file.txt: echo 3 > file.txt to change the state of your file in the working directory (or sc file.txt '3' in PowerShell).
- 9. What does git diff tell you?
- 10. What does git diff --staged tell you?
- 11. Explain what is happening

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- 14. What does git status tell you now?
- 15. Stage the change and make a commit
- 16. What does the log look like?
- 17. Overwrite the content in file.txt: echo 4 > file.txt (or sc file.txt '4' in PowerShell)
- 18. What is the content of file.txt?
- 19. What does git status tell us?
- 20. Run git checkout file.txt
- 21. What is the content of file.txt?
- 22. What does git status tell us?

### **Useful commands**

- git add
- git commit
- git commit -m "My lazy short commit message"

- git reset
- git checkout
- git log
- git log -n 5
- git log --oneline
- git log --oneline --graph
- git reset HEAD
- git checkout

# **Aliases**

You can set up aliases as such: git config --global alias.lol 'log --oneline -- graph --all' This might be useful to you.