Assignment 2 Solution

Introduction

The goal of this assignment is to consolidate skills related to concepts learned in Module 3 and also utilize the concepts and practices covered in Module 1 and Module 2.

In this assignment, the student is expected to do hands-on in the following areas:

- Undoing Git operations such as:
    - Git Checkout
    - Git Revert and
    - Git Reset
- Fundamental Git & GitHub operations such as:
    - Push and
    - Pull
- Fundamentals of SSH communication between local and remote repositories (in our case GitHub).

Solution statement with steps

```
# Download project from http://www.initializr.com/ or use an existing unversioned project
# Let's assume that our repo name is assignment2-repo
# Let's assume we have 2 files called testfile1 and testfile2 for the sake of this assignment.

################### STEP-1

# switch to directory assignment2-repo
$ cd assignment2-repo

# initialize the repository
$ git init

################### STEP-2
# add your changes to the staging area
$ git add .

# fire you first commit of the repo
$ git commit -m "initial commit"
```

```
# Now make some changes in your artifacts and build up the commit history.
# The history may contain 6 commits in all including the initial commit.
# Let's say we are making changes to the 2 files called testfile1 and testfile2.

################### STEP-3

# checkout at commit-id-3
$ git checkout commit-id-3

# Modify testfile1, commit it and the commit message is "commit-message-7
# Retain the above change

# Create new branch testbranch1 and checkout the branch at the same time
$ git checkout -b testbranch1

# switch back to master
$ git checkout master

# checkout at commit-id-2 only for file testfile2
$ git checkout commit-id-2 testfile2

# commit your changes
$ git commit -m "commit-message-8"

# Undoing commit-id-8
$ git revert HEAD

# edit testfile2
$ vi testfile2

# add changes to testfile2 to the staging area
$ git add testfile2

# reset you changes for testfile2
$ git reset testfile2

# edit testfile3
$ vi testfile3

# add changes to testfile3 to the staging area
$ git add testfile3

# do a hard reset of testfile3
$ git reset testfile3 --hard


################### STEP-4
```

```
# you can use any text editor of your liking
$ vi 404.html

# commit your changes
$ git commit -am "commit-message-9"

# push to GitHub
$ git push

# Modify the file 404.html directly in the GitHub remote repo
# Commit the changes in GitHub (commit message is "commit-message-10")

# Now pull the remote changes in local repo
$ git pull origin master
```