Github Project: Git Commands Documentation Template

Programming for Data Science Nanodegree Program

You will use this template to copy and paste the git commands you used to complete all tasks on your local and remote git repository for this project. This file will serve as your submission for the GitHub project.

## Instructions:

1. Make a copy of this Git Commands Documentation template on your Google Drive.
2. Complete the four sections in this document with the appropriate git commands.
3. Download this document as a PDF file.
4. Submit this on the Project Submission page within the Udacity Classroom.

# 1. Set Up Your Repository

**The following are the steps you will take to create your git repository, add your python code, and post your files on GitHub.**

Step 1. Create a GitHub profile (if you don’t already have one).

Step 2. Fork a repository from Udacity’s [GitHub Project repository](https://github.com/udacity/pdsnd_github) and provide a link to your forked GitHub repository here:

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| **GitHub Repository Link** |
| [congdinh2008/pdsnd\_github: GitHub project (Project 3) repository for PDSND](https://github.com/congdinh2008/pdsnd_github) |

Step 3. Complete the tasks outlined in the table below and copy and paste your git commands into the “Git Commands” column. The first git command is partially filled out for you.

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|  | **Tasks** | **Git Commands** |
| A. | Clone the GitHub repository to your local repository. | git clone https://github.com/congdinh2008/pdsnd\_github |
| B. | Move your bikeshare.py and data files into your local repository. | **No git command needed (you can use cp or a GUI)** |
| C. | Create a .gitignore file containing the name of your data file. | **No git command needed (you can use touch or a GUI)** |
| D. | List the file names associated with the data files you added to your .gitignore | **No git command needed (add the file names into your .gitignore file)** |
| E. | Check the status of your files to make sure your files are not being tracked | $ git status |
| F. | Stage your changes. | # add all  $ git add .  # add a file  $ git add bikeshare.py |
| G. | Commit your changes with a descriptive message. | $ git commit -m “Add starter code - bikeshare.py” |
| H. | Push your commit to your remote repository. | $ git push origin master |

# 2. Improve Documentation

**Now you will be working in your local repository, on the BikeShare python file and the README.md file. You should repeat steps C through E three times to make at least three commits as you work on your documentation improvements.**

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|  | **Tasks** | **Git Commands** |
| A. | Create a branch named *documentation* on your local repository. | # Command create and checkout  $ git checkout -b documentation  # Command create only  $ git branch documentation |
| B. | Switch to the *documentation* branch. | $ git checkout documentation |
| C. | Update your README.md file. | **No git command needed (edit the text in your README.md file)** |
| D. | Stage your changes. | $ git add README.md |
| E. | Commit your work with a descriptive message. | $ git commit -m “Update project overview and folder structure in README.md” |
| F. | Push your commit to your remote repository branch. | $ git push origin documentation |
| G. | Switch back to the master branch. | $ git checkout master |

# 3. Additional Changes to Documentation

**In a real world situation, you or other members of your team would likely be making other changes to documentation on the documentation branch. To simulate this follow the tasks below.**

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|  | **Tasks** | **Git Commands** |
| A. | Switch to the *documentation* branch. | $ git checkout documentation |
| B. | Make at least 2 additional changes to the documentation - this might be additional changes to the README or changes to the document strings and line comments of the bikeshare file. | Using git diff <commit-sha> <commit-sha> to check update  **$ git diff 60d42d1cf3cda6d59ab45e14af1881293622dcdb 41beca7fbc7bbe4ebee0c6910686f3581b3a7a3c**  diff --git a/bikeshare.py b/bikeshare.py  index 4a23417..5a58fbc 100644  --- a/bikeshare.py  +++ b/bikeshare.py  @@ -2,12 +2,15 @@ import time  import pandas as pd  import numpy as np    +# City data dictionary  CITY\_DATA = {'chicago': 'chicago.csv',  'new york city': 'new\_york\_city.csv',  'washington': 'washington.csv'}    +# Months list  MONTHS = ('january', 'february', 'march', 'april', 'may', 'june')    +# Weekdays list  WEEKDAYS = ('monday', 'tuesday', 'wednesday',  'thursday', 'friday', 'saturday', 'sunday')  **$ git diff 18465d563332de54f7d0244c0bcab6fc4388d457 60d42d1cf3cda6d59ab45e14af1881293622**  diff --git a/README.md b/README.md  index ac045c4..5c8756a 100644  --- a/README.md  +++ b/README.md  @@ -5,7 +5,7 @@  - [Project Overview](#project-overview)  - [Tools or Dependencies](#tools-or-dependencies)  - [Folder Structure](#folder-structure)  -  + - [How to run the script](#how-to-run-the-script)    ## Project 02 - Python    @@ -30,4 +30,32 @@ Go to project-02-python folder and you will find the following:  ```bash  ├── bikeshare.py  └── README.md  -```  \ No newline at end of file  +```  +  +### How to run the script  +  +Download the data from the following links and place all of csv files in the project-02-python folder:  +Data Source: [Divvy Data](https://drive.google.com/file/d/1F3bp6IXNZhE7SVzNU7VGblTTmT3iarlR/view?usp=sharing)  +  +Open the terminal and go to the project-02-python folder  +  +Create a virtual environment and activate it  +  +```bash  + python -m venv venv  + source venv/bin/activate  +```  +  +Install the dependencies  +  +```bash  + pip install -r requirements.txt  +```  +  +Run the script  +  +```bash  + python bikeshare\_2.py  +```  +  +Follow the instructions on the screen. |
| C. | After each change, stage and commit your changes. When you commit your work, you should use a descriptive message of the changes made. Your changes should be small and aligned with your commit message. | $ git add .  $ git commit -m “Update how to run script in README.md”  $ git add .  $ git commit -m “Comment for constant data in bikeshare.py” |
| D. | Push your changes to the remote repository branch. | $ git push origin documentation |
| E. | Switch back to the *master* branch. | $ git checkout master |
| F. | Check the local repository log to see how *all the branches* have changed. | $ git log --oneline --graph --all |
| G. | Go to Github. Notice that you now have two branches available for your project, and when you change branches the README changes. | **No git command needed** |

# 4. Refactor Code

**Now you will be working in your local repository, on the code in your BikeShare python file to make improvements to its efficiency and readability. You should repeat steps C through E three times to make at least three commits as you refactor.**

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|  | **Tasks** | **Git Commands** |
| A. | Create a branch named *refactoring* on your local repository. | $ git branch refactoring |
| B. | Switch to the *refactoring* branch. | $ git checkout refactoring |
| C. | Similar to the process you used in making the documentation changes, make 2 or more changes in refactoring your code. | **No git command needed (edit the code in your python file)** |
| D. | *For each change,* stage and commit your work with a descriptive message of the changes made. | $ git commit -m “Format line code in get\_filters function”  $ git commit -m “Add heading of feature and print thank you when exit” |
| E. | Push your commits to your remote repository branch. | $ git push origin refactoring |
| F. | Switch back to the *master* branch. | $ git checkout master |
| G. | Check the local repository log to see how *all the branches* have changed. | $ git log --oneline --graph --all |
| H. | Go to GitHub. Notice that you now have 3 branches. Notice how the files change as you move through the branches. | **No git command needed** |

# 5. Merge Branches

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|  | **Tasks** | **Git Commands** |
| A. | Switch to the *master* branch. | $ git checkout master |
| B. | Pull the changes you and your coworkers might have made in the passing days (in this case, you won't have any updates, but pulling changes is often the first thing you do each day). | $ git pull origin |
| C. | Since your changes are all ready to go, merge all the branches into the master. Address any merge conflicts. If you split up your work among your branches correctly, you should have no merge conflicts. | $ git merge refactoring  $ git merge documentation |
| D. | You should see a message that shows the changes to the files, insertions, and deletions. | **No git command needed** |
| E. | Push the repository to your remote repository. | $ git push origin |
| F. | Go to GitHub. Notice that your master branch has all of the changes. | **No git command needed** |

## Submission:

This concludes the project.

* Please review this document to make sure you entered all the required response fields in all four sections.
* Download this document as a PDF file.
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