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O Object
O Oriented
P Programming

S1 = Python with Bianca
S2 = Java with Bryan
DT228(TU856)/DT282(TU858) - 2

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Lab4 Solution

Your Common `git` Issues and Fixes

Read the error messages!

- **`git push`** does not work
  - What is git pushing to? Have a look with

  ```
  $ git remote -v
  ```

  ```
  origin    https://github.com/Student/OOP2020-21.git (fetch)
  origin    https://github.com/Student/OOP2020-21.git (push)
  upstreamhttps://github.com/BiancaSP/OOP2020-21.git (fetch)
  upstreamhttps://github.com/BiancaSP/OOP2020-21.git (push)
  ```

- Typo?
- Only one of them showing up?
- Both locations the same?

```
$ git remote set-url origin https://github.com/TheBianca/OOP2020-21.git
```

Your Common `git` Issues and Fixes

- Did I make a change or not?

```
git diff lab4:Labs/lab4_word_cloud.py master:Labs/lab4_word_cloud.py
diff --git a/Labs/lab4_word_cloud.py b/Labs/lab4_word_cloud.py
index e116445..d6aeed6 100644
--- a/Labs/lab4_word_cloud.py
+++ b/Labs/lab4_word_cloud.py
@@ -13,8 +13,6 @@ class WordCloud:
         # you might like to run the following line only
         # if there wasn't a problem creating the dictionary
         self.create_html(self.my_dict)
-        # making a change here
-        print("edited for change")

    # this function creates the actual html file
    # takes a dictionary as an argument
```

Your Common `git` Issues and Fixes

- Anything new in upstream (but don't want to download yet)?

```
$ git whatchanged upstream/master -n 1
commit 85a0fd9e06e2ebdacb792f3427ab84077fdcd583 (upstream/master,
origin/master, origin/HEAD, master)
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Date:    Wed Oct 14 14:09:43 2020 +0100

    Lab Files for Week 4

:000000 100644 0000000 a6da17f A        Labs/gettisburg.txt
:000000 100644 0000000 d6aeed6 A        Labs/lab4_word_cloud.py
```

Your Common `git` Issues and Fixes

- Everything looks a mess. I tried to 'manually' fix it by deleting some files, and trying to download everything again but it's still not working

  - Start with upstream and make sure that your local repository's master branch is the same as upstream's master branch. If you are worried to lose work, create a new branch for backup
    ```
    $ git fetch upstream
    $ git checkout -b backup_branch
    $ git checkout master
    $ git reset --hard upstream/master
    $ git merge upstream/master
    ```
  - Then save your work that is now in the backup_branch up to your own gitHub repository `$ git push origin backup_branch`
  - And then overwrite the master on origin
    ```
    $ git push origin master --force
    ```

Your Common `git` Issues and Fixes

- Do I really need to copy everything to origin (aka my own copy on GitHub
  - No, but I would recommend it
  - Firstly, it's a handy backup of your work that will always be available for you to look back on, even if your computer fails
  - Then, you might like to use it as a portfolio of the skills you have acquired.

Your Common `git` Issues and Fixes

- Will `git` ever go away and leave me alone please?

> **NO!**
> There will always be some form of version control. The principles are often the same. Push through the pain now and your future self will thank you!

> Strengthen your CV by getting involved with one of the many available projects on GitHub looking for volunteer participants!

New Python Code - What to do with it??????

- Run it, see does it work (lab code should work out of the box)
- Then go through the provided code
  - Read it line by line
  - Is there anything new?
  - Is there anything that surprises you and/or you really don't understand what happens here?
  - After running the original code, re-read the task for the lab. Is there anything unclear? If so, speak to **me or your tutor** about it!
  - Change something in the code. Run it. Does it still work? If the change broke it do you understand why? Does everything run as expected? If so, move on to solving the lab exercise.

Talk to your lab tutor. You can ask for a private Teams room if you are worried about other students seeing your code or hearing your questions!

Summary

★ **git**

★ **New Code**

★ **Solution walk through**

References

1. Python Documentation: Dictionary, https://docs.python.org/3/tutorial/datastructures.html?highlight=dictionary#dictionaries , accessed Oct 2020.
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