

CMPE 331- SOFTWARE ENGINEERING CONCEPTS

How to create Git Repository and Transfer to Online Git Service Provider

It is assumed that you already have the Git installed on your computers. In our lab computers, it is install, if you are willing to use your own computers, you are required to install git. (<https://git-scm.com/>)

First thing to do is that you need to configure your computer/local machine with following commands.

```
git config --global user.name "Tahsin Yazkan"  
git config --global user.email tahsin.yazkan@bilgiedu.net  
git config --list # to check the configuration
```

After that, you need to create a new folder in your computer. For this purpose, you may use Command Prompt(cmd) or Terminal application.

```
mkdir git-test  
cd git-test
```

Now we have a new folder named git-test (You can obviously name it whichever name you would like to call). Inside this folder, you can move your project folders or you may skip this step and using command line interface you can change your current directory to your folder that you project has been located.

After having the folder and the project files within this folder, we need to initialize the repository using the following commands:

```
git init  
  
git status# you can use this command when it is necessary to see  
the modifications.  
  
git add . # to add all the regarding files to the staging area.  
  
git commit -m "First Commit" # making first commit.  
  
git status# you can check again the status.  
  
git log -- oneline # to see a brief history of repository.
```

If you check the brief history of the repository, you can see that each commit has one unique id, so using this CommitId, we can revert back to one of the previously committed version of the repository. In order to make a sensible example for this command, it is assumed that you have more than one commits to your git repository.

```
git checkout CommitId filename(e.g. Hello.java)
```

You are also able to discard this last change and if you decide to continue with the last version of the repository, you can type the following commands:

```
git reset HEAD filename(e.g. Hello.java)
```

```
git checkout - filename(e.g. Hello.java)
```

Instead of specifying the filename or the step you could just type

```
git reset
```

Transfer Local Git Repository to Online Repository:

You need to have GitHub account to complete this part. If you have the account, you just need to go and create a new repository with the same name. After that, from your computer using cmd or Terminal again, we can move the folder to GitHub.

```
git remote add origin https://github.com/thsnyszkn/git-test.git  
git push -u origin master
```