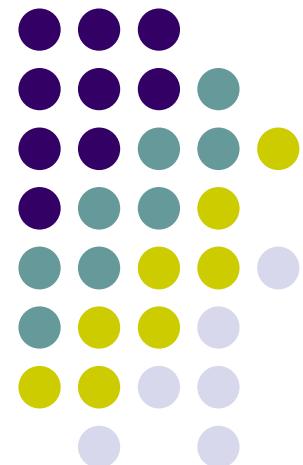


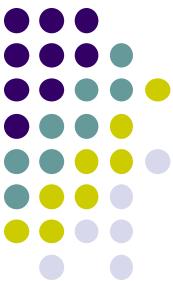
# Submitting assignments using GitHub

2019. Fall

Instructor: Joonho Kwon

Data Science Laboratory, PNU





# The Assignment Workflow (1/2)

- 1. Homework Announced
  - The assignment specifications and any related materials are posted online.
  - You are invited to access to a GitHub project containing starter code.
- 2. Work on it
  - Clone the repository from GitHub
  - Work on the assignment
  - Commit changes periodically
  - Push changes to GitHub for safe keeping

# The Assignment Workflow (2/2)



- 3. Turn it in
  - Push any unpushed commits to GitHub
  - Make sure that your reflection.md is present, and it contains any submission comments you wish to make.
  - Log into GitHub's website and verify that your files look OK.

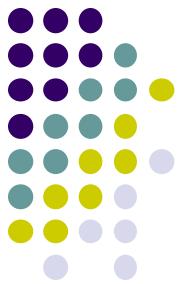


# Step1: Homework announced

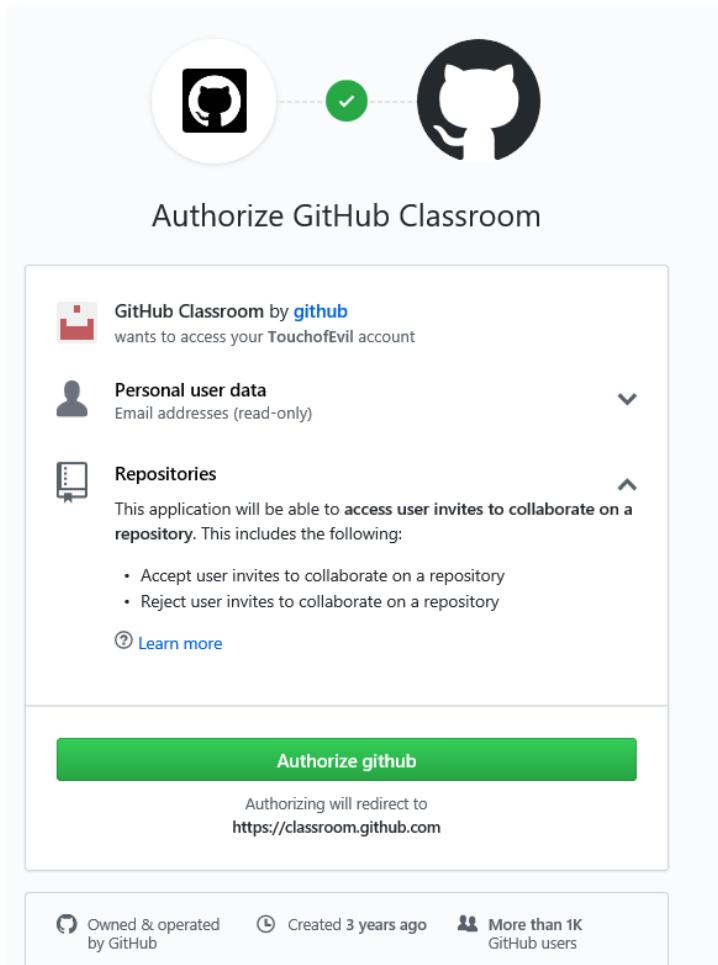
- The Invitation link for Hw3
  - <https://classroom.github.com/a/NO6FXxP3>
- Getting the code (git clone)
  - 1. click the link and log in to github
  - 2. copy your repository's url
  - 3. Navigate to the directory where you would like to download your repository
  - 4. clone over HTTPS

```
# git clone <repository URL from step 2>
$ git clone https://github.com/TouchofEvil/test.git
```

# Click the invitation link (1/4)



- 1. Click this link
  - <https://classroom.github.com/a/Mxiz86gK>
- 2. log into Github
- 3 Click Authorize group





# Click the invitation link (2/4)

- 3. Accept this assignment (may not see this)

System Programming @PNU (2019. Fall)  
pnusystemprog

Accept the 2019sp-hw3 assignment

Accepting this assignment will give you access to the [2019sp-hw3-templeofking](#) repository in the [@pnusystemprog](#) organization on GitHub.

[Accept this assignment](#)

- 4. Remember the url
  - <https://github.com/pnusystemprog/2019sp-hw3-YourID>

Accepted the 2019sp-hw3 assignment

You are ready to go!

You may receive an invitation to join [@pnusystemprog](#) via email invitation on your behalf. No further action is necessary.

Your assignment has been created here: <https://github.com/pnusystemprog/2019sp-hw3-templeofking>



# Click the invitation link (3/4)

- Check your repository
  - <https://github.com/pnusystemprog/2019sp-hw3-YourID>

Description

2019sp-hw3-templeofking created by GitHub Classroom

Website

Website for this repository (optional)

Save or Cancel

Manage topics

1 commit 1 branch 0 releases 1 contributor

Branch: master ▾ New pull request Create new file Upload files Find File Clone or download ▾

templeofking Initial commit Latest commit b2e22f0 1 minute ago

README.md Initial commit 1 minute ago

datalab-code.tar Initial commit 1 minute ago

README.md

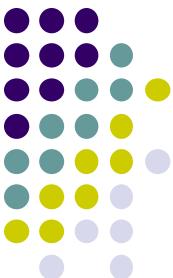
System Programming @ PNU (2019, Fall) HW3

HW3: Datalab

Please create "SName\_Sno.txt" file at your local repository The filename should consist of your student number and name

For Example, SName: Joonho Kwon Sno: 2017001 Then: joonho\_kwon\_2017001.txt

Click



# Click the invitation link (4/4)

- Your git repository address for cloning

The screenshot shows a GitHub repository page for 'pnusystemprog/2019sp-'. At the top, there are buttons for 'New file', 'Upload files', 'Find File', and a green 'Clone or download' button with a dropdown arrow. The dropdown menu is open, showing two options: 'Clone with HTTPS' (with a question mark icon) and 'Use SSH'. Below these is a text input field containing the URL <https://github.com/pnusystemprog/2019sp->. To the right of the URL is a clipboard icon with a red box around it, indicating it can be copied to the clipboard. At the bottom of the dropdown are buttons for 'Open in Desktop' and 'Download ZIP'.

Clone with HTTPS ⓘ Use SSH

Use Git or checkout with SVN using the web URL.

<https://github.com/pnusystemprog/2019sp-> 

copy to clipboard

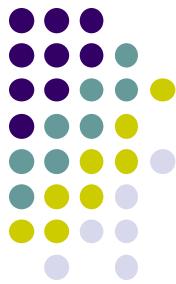
Open in Desktop Download ZIP

# Step 2: Work on it



- Cloning the repository
  - git clone
- Working on your codes
  - git add
- Committing Code
  - git commit
- Looking through your Repository
  - git status, git log
- Pushing your Commits
  - git push

# Configure git



- Tell git who you are
  - Run the following commands to tell Git who you are

```
# Use your name
```

```
$ git config --global user.name "John Doe"
```

```
# Use your email address
```

```
$ git config --global user.email johndoe@example.com
```

- or edit them in `~/.gitconfig` (recommended)
- Checking the configuration

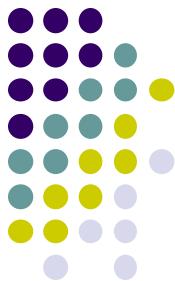
```
# Check the configuration
```

```
$ git config --list
```

```
user.name=John Doe
```

```
user.email=johndoe@example.com
```

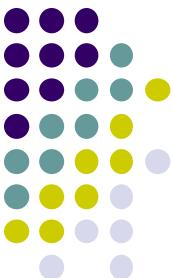
# Cloning the repository (1/2)



- Again check the url
  - Each student will have his own url
  - <https://github.com/pnusystemprog/2019sp-hw3-TouchofEvil>
- Do these commands
  - First, make a homework directory
  - Change directory and clone the repository

```
$ mkdir homeworks
$ cd homeworks

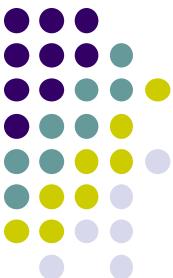
# clone the hw3 directory
$ git clone https://github.com/pnusystemprog/2019sp-hw3-templeofking.git
Cloning into '2019sp-hw3-templeofking'...
Username for 'https://github.com': your github ID
Password for 'https://YourID@github.com': *****
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (4/4), done.
remote: Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (4/4), done.
```



# Cloning the repository (2/2)

- Check the local directory
  - Note that the directory name depends on your github ID
  - After changing to hw2-datalab-yourID directory, you can see datalab-handout.tar

```
$ ls  
2019sp-hw3-templeofking  
$ cd 2019sp-hw3-templeofking  
$ ls -al  
total 1172  
drwxrwxr-x 3 dslab dslab 4096 10? 1 19:55 .  
drwxrwxr-x 3 dslab dslab 4096 10? 1 19:54 ..  
-rw-rw-r-- 1 dslab dslab 1276928 10? 1 19:55 datalab-code.tar  
drwxrwxr-x 8 dslab dslab 4096 10? 1 19:55 .git  
-rw-rw-r-- 1 dslab dslab 498 10? 1 19:55 README.md
```



# Work on it

- Untar datalab-handout.tar

```
$ tar xvf datalab-code.tar
tar xvf datalab-code.tar
bits.c
tests.c
bits.h
...
Driverhdrs.pm
Driverlib.pm
fshow.c
ishow.c
Makefile
README
```



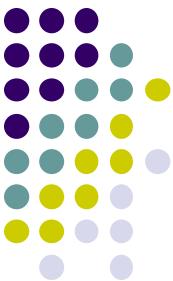
# Make command (1/2)

- Execute the make command after untar the datalab-code.tar

```
$ make
```

- When you see the following errors
  - Later version of Ubuntu 14.04/16.04
    - fatal error: sys/cdefs.h: No such file or directory
  - Then, execute following commands

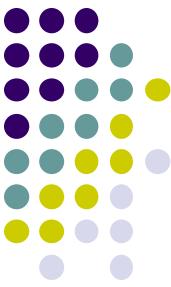
```
$ sudo apt-get install g++-multilib
```



# Make command (2/2)

- Make again

```
$ make
gcc -O -Wall -m32 -lm -o btest bits.c btest.c decl.c tests.c
btest.c: In function ?ain?
btest.c:528:9: warning: variable ...
    int errors;
    ^
gcc -O -Wall -m32 -o fshow fshow.c
gcc -O -Wall -m32 -o ishow ishow.c
```



# Add a txt file

- Add a txt file
  - Create “SName\_Sno.txt” file at your local repository
    - The filename should consist of your student number and name
  - Example
    - SName: Joonho Kwon
    - Sno: 2017001
    - joonho\_kwong\_2017001.txt

```
$ touch joonho_kwong_2017001.txt  
$ git add joonho_kwong_2017001.txt
```

If this file is not existed in the github repository,  
students will have -10% deduction from total scores.



# Adding the source code

- Using git add

```
$ make clean  
  
$ git add *.c  
$ git add *.h  
$ git add *.pm  
$ git add *.pl  
$ git add README  
$ git add Makefile
```



# Checking status

## ● Git status

```
$ git status  
On branch master
```

...  
(use "git reset HEAD <file>..." to unstage)

```
new file: Driverhdrs.pm  
new file: Driverlib.pm  
new file: Makefile  
new file: README  
new file: bits.c  
new file: bits.h  
...  
new file: fshow.c  
new file: ishow.c  
new file: joonho_kwong_2017001.txt  
new file: tests.c
```

Untracked files:

(use "git add <file>..." to include in what will be committed)

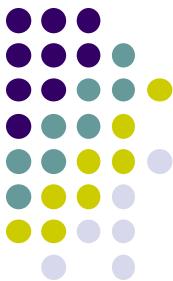
```
btest  
dlc  
fshow  
ishow
```



# Commit all changes

- Commit newly added files at the local repository

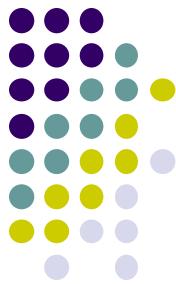
```
$ git commit -m "Add a txt file and source codes"
[master 32271b7] Add a txt file and source codes
 14 files changed, 2114 insertions(+)
 create mode 100755 Driverhdrs.pm
 create mode 100755 Driverlib.pm
 create mode 100755 Makefile
 create mode 100755 README
 create mode 100755 bits.c
 create mode 100755 bits.h
 create mode 100755 btest.c
 create mode 100755 btest.h
 create mode 100755 decl.c
 create mode 100755 driver.pl
 create mode 100755 fshow.c
 create mode 100755 ishow.c
 create mode 100644 joonho_kwong_2017001.txt
 create mode 100755 tests.c
```



## Step 3: Turn it in

- Add the file to your repository (`git add`) and commit the new file (`git commit`).
- Push all your new commits to GitHub (`git push`).
- Check the GitLab website to ensure that your code looks the way you want it to.

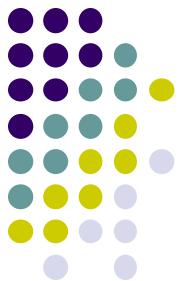
# Pushing your Commits



- Git push command

```
$ git push origin master
Username for 'https://github.com': YourID
Password for 'https://YourID@github.com': Your Passwd
Counting objects: 18, done.
Delta compression using up to 4 threads.
Compressing objects: 100% (17/17), done.
Writing objects: 100% (18/18), 19.40 KiB | 0 bytes/s, done.
Total 18 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/pnusystemprog/hw2-datalab-TouchofEvil
 13b7d85..32271b7 master -> master
```

# Checking at the github page



hw2-datalab-TouchofEvil created by GitHub Classroom

[Edit](#)

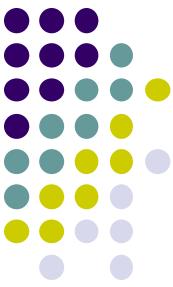
[Add topics](#)

---

5 commits 1 branch 0 releases 1 contributor

Branch: master ▾ [New pull request](#) [Create new file](#) [Upload files](#) [Find file](#) [Clone or download ▾](#)

tempoleoking	Add a txt file and source codes	Latest commit 32271b7 a minute ago
<a href="#">Driverhdrs.pm</a>	Add a txt file and source codes	a minute ago
<a href="#">Driverlib.pm</a>	Add a txt file and source codes	a minute ago
<a href="#">Makefile</a>	Add a txt file and source codes	a minute ago
<a href="#">README</a>	Add a txt file and source codes	a minute ago
<a href="#">README.md</a>	Create README.md	an hour ago
<a href="#">bits.c</a>	Add a txt file and source codes	a minute ago
<a href="#">bits.h</a>	Add a txt file and source codes	a minute ago
<a href="#">btest.c</a>	Add a txt file and source codes	a minute ago
<a href="#">btest.h</a>	Add a txt file and source codes	a minute ago
<a href="#">datalab-code.tar</a>	replacing tar file	26 minutes ago



*may the Force be with you*

