

Good Afternoon CEG 2350!

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Quote of the week:

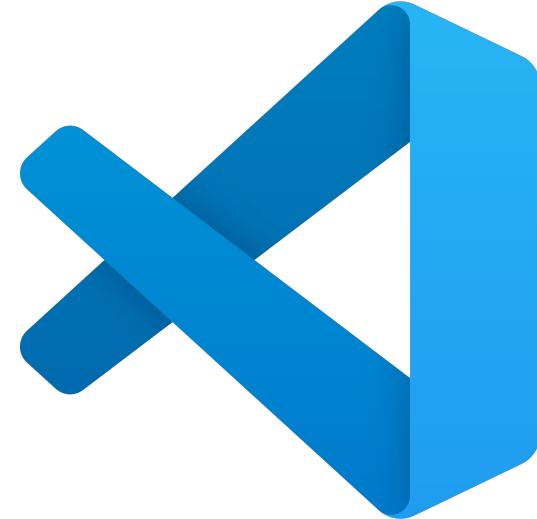
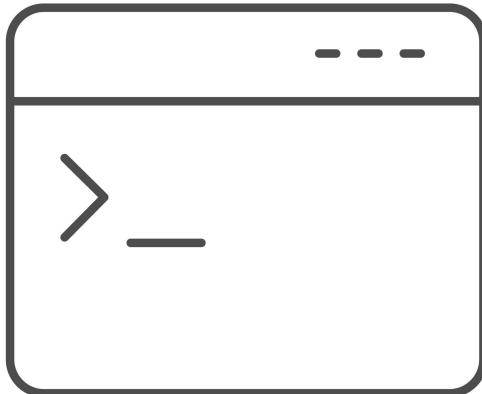
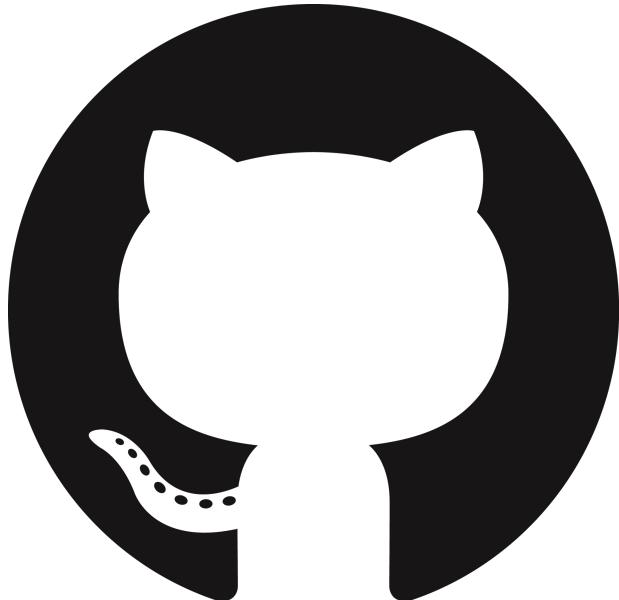
“You can catch flies with honey, but you can catch more honeys by being fly”

1:25pm - 2:20pm

September 2nd - September 5th

Check in! How was Lab01?

Questions over anything up until now?



Beginning Lab02

Lab Instructions: <https://pattonsgirl.github.io/CEG2350/Labs/Lab02/Instructions.html>

Lab Template:

<https://raw.githubusercontent.com/pattonsgirl/CEG2350/refs/heads/main/Labs/Lab02/LabTemplate.md>

AWS Academy email? Instances set up yet?

The AWS logo, consisting of the letters "AWS" in white, is centered within a stylized orange cloud shape. The cloud has a soft, rounded form with a slight gradient, appearing darker at the top and lighter at the bottom.

Setting up AWS Instance - Part 1

Text Guide to set up AWS: (Located in Professor Duncan's GitHub)

<https://github.com/pattonsgirl/CEG2350/blob/main/AWSAcademySetup.md>

Course Invitation

AWS Academy <notifications@instructure.com>

To: ☺ Cox, Aiden

⚠ This sender notifications@instructure.com is from outside your organization.



Mon 2/17/2025 2:03 PM

Block sender Show blocked content

You don't often get email from notifications@instructure.com. [Learn why this is important](#)

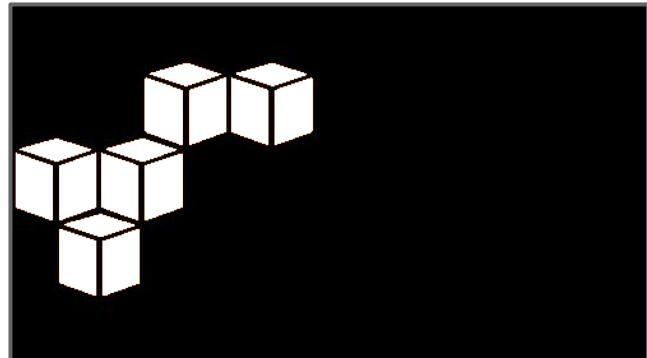
You've been invited to participate in the course, AWS Academy Learner Lab [106943].
Course role: Student

Name: cox.378@wright.edu
Email: cox.378@wright.edu

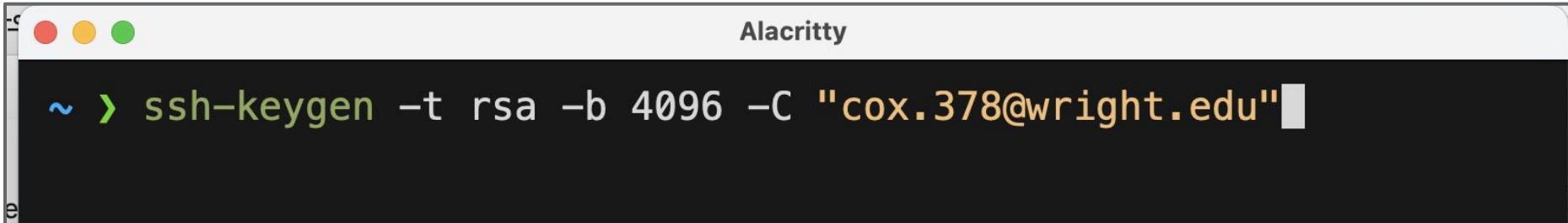
[Get Started](#)

[Click here to view the course page](#) | [Update your notification settings](#)

Let's walkthrough the notes on
GitHub!



GitHub Repo Cloned?



A screenshot of a terminal window titled "Alacritty". The window has three colored window control buttons (red, yellow, green) at the top left. The terminal is displaying a single command:

```
~ > ssh-keygen -t rsa -b 4096 -C "cox.378@wright.edu"
```

```
~ > cd .ssh                                         10:57:31 AM

~/.ssh > ls                                         11:06:31 AM
config  id_ed25519  id_ed25519.pub  known_hosts  known_hosts.old

~/.ssh > cat id_ed25519.pub                         11:06:32 AM
ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIINI0UYbhyFfq2kUSH1HFDYvV7xz
P+caurXIS29nWg9N cox.378@wright.edu

~/.ssh >                                         11:07:31 AM
```

GitHub Repo Cloned?



Aiden Cox (aidenc17)

Your personal account Switch settings context ▾

[Go to your personal profile](#)

Public profile

Account

Appearance

Accessibility

Notifications

Access

Billing and licensing

Emails

Password and authentication

Sessions

SSH and GPG keys

Organizations

Enterprises

Moderation

SSH keys

This is a list of SSH keys associated with your account. Remove any keys that you do not recognize.

Authentication keys



CEG2350 f24 Local

SHA256:S9QDf7jxq1ERKerzyUk8W62vHd+wYTAw4/F74Mfj7CI

Added on Aug 27, 2024

Last used within the last 9 months — Read/write

[Delete](#)



AWS CEG2350 f24

SHA256:7mR20RWew1xI/Fd05EUotsiCTAjUF50jlbSSGd7Yh0E

Added on Aug 27, 2024

Last used within the last 11 months — Read/write

[Delete](#)



Desktop WSL

SHA256:ZDw6zR05vxQA6pDs1f5tNg0YP+lh4bIXJr0sqd2L00

Added on Sep 7, 2024

Last used within the last 12 months — Read/write

[Delete](#)



[New SSH key](#)

GitHub Repo Cloned?

Add new SSH Key

Title

CEG2350-AWS

Key type

Authentication Key ▾

Key

```
ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIINI0UYbhyFfq2kUSH1HFDYvV7xzP+caurXIS29nWg9N cox.378@wright.edu
```

Add SSH key

GitHub Repo Cloned?

Screenshot of a GitHub repository page titled "ceg2350f25-aidenc17". The repository is private and was forked from "WSU-kduncan/ceg2350-f25-ceg2350f25-CEG2350-LabTemplate".

The repository has 1 branch and 0 tags. The "main" branch is selected. The status bar indicates the branch is up to date with the upstream.

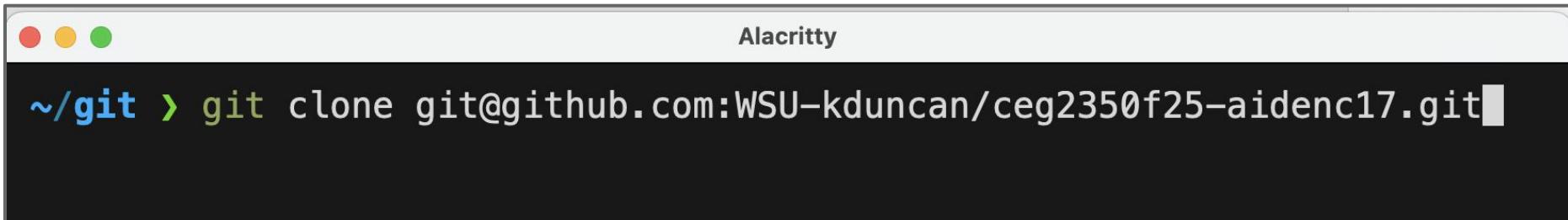
On the right, a cloning interface is displayed:

- Local:** Clone via HTTPS (selected), SSH, or GitHub CLI.
- Codespaces:** Option to open the repository in a codespace.
- Clone URL: `git@github.com:WSU-kduncan/ceg2350f25-aidenc17`
- Instructions: "Use a password-protected SSH key."
- Other options: Open with GitHub Desktop, Download ZIP.

The repository contents listed on the left include:

- github-classroom[bot]**: Initial commit
- sample**: Initial commit
- README.md**: Initial commit
- README**

GitHub Repo Cloned?



A screenshot of a macOS terminal window titled "Alacritty". The window has the standard OS X title bar with red, yellow, and green buttons. The terminal itself is dark-themed. In the top right corner of the terminal window, the word "Alacritty" is displayed. The main text area shows a command being entered: `~/git > git clone git@github.com:WSU-kduncan/ceg2350f25-aidenc17.git`. The cursor is visible at the end of the command line.

After that, the repo should have been cloned onto your AWS instance and we can now `cd` into it and make changes!

Do I have Permission? - Part 2

```
~ > ll 11:43:57 AM
drwxr-xr-x@ - aidencox 22 Apr 22:44 AndroidStudioProjects
drwxr-xr-x@ - aidencox 7 May 21:19 Applications
drwx-----@ - aidencox 21 Jun 12:33 Desktop
drwx-----@ - aidencox 12 May 20:26 Documents
drwx----- - aidencox 19 Jun 20:29 Downloads
drwxr-xr-x - aidencox 12 May 20:34 git
drwxr-xr-x@ - aidencox 13 Mar 14:01 gradingScripts
drwxr-xr-x@ - aidencox 29 Apr 12:59 IdeaProjects
drwxr-xr-x - aidencox 4 Apr 15:03 java
drwxr-xr-x@ - aidencox 17 Feb 15:39 Keys
drwx-----@ - aidencox 23 Jun 11:15 Library
drwx----- - aidencox 11 Feb 12:48 Movies
drwx----- - aidencox 16 Feb 20:30 Music
.rw-r--r--@ 87 aidencox 24 Mar 12:07 package-lock.json
drwx----- - aidencox 9 Apr 15:12 Pictures
drwxr-xr-x - aidencox 10 Feb 20:04 Public
drwxr-xr-x@ - aidencox 8 Apr 22:10 pythonEnv312
~ > 11:43:58 AM
```

Reminder that the rest of the lab should be completed in your newly created AWS Instance.

For this part, you will explain each of the permissions granted when running the command. Do not forget to include all of the flags

Graphic on next page

Permission Graphic

User	Group			Others				
read	write	execute	read	write	execute	read	write	execute

Rest of the lab - Trial Run

Questions on Permissions?

Rest of the lab go ahead and work through, asking questions if need be.

Part 3 - Regular bob

For these exercises, replace `bob` with a username based on **your** first initial followed by last name. For example, "John Smith" would be `jsmith`

Perform the following exercise on your AWS instance.

- Useful commands for this part: `adduser`, `sudo`, `su`, `chown`, `pwd`, `cd`, `whoami`, `exit`

1. Create a new user named `bob` (replace with your username, see above)
2. What is the path to `bob`'s home directory?
3. Can `ubuntu` add files to `bob`'s home directory? Why or why not?
 - For credit, answer must include what was to to justify answer.
4. Switch to the user `bob`
5. Get to `bob`'s home directory
6. Can `bob` add files to `bob`'s home directory? Why or why not?
 - For credit, answer must include what was to to justify answer.
7. Switch back to the `ubuntu` user
 - Note that the `ubuntu` user does not have an account password. You'll have to find a more administrative way to switch accounts...
8. Return to the `ubuntu` user's home directory

Rest of the lab - Trial Run

Questions on Permissions?

Rest of the lab go ahead and work through, asking questions if need be.

Part 4 - Get a `squad`

Perform the following exercise on your AWS instance.

Reminder to replace references to BOB with your username of first initial, last name (ex. jsmith)

- Useful commands for this part: `addgroup`, `usermod`, `chown`, `chgrp`, `su`, `sudo`, `mkdir`

Create a folder named `share` in the `ubuntu` user's home directory and create some files and subfolders in the folder to play with.

1. Create a new group named `squad`
2. Add `ubuntu` and `BOB` to the `squad` group
 - replace `BOB` with your username, see instructions above
3. Allow `squad` to view the `ubuntu` user's home directory contents.
4. Change permission of the `share` directory in the `ubuntu` user's home directory so that `squad` is the group for the whole folder and members of `squad` can make changes in the folder.
 - Include all files and subdirectories in `share`
5. Switch user to `BOB`. Test that `BOB` can view the contents of the `ubuntu` user's home directory.
 - If not, make a note in your answer in Step 3 about additional change(s).
6. As `BOB` create a file in `share`. Describe the full set of permissions / settings that enabled `BOB` to do this action.

Rest of the lab - Trial Run

Questions on Permissions?

Rest of the lab go ahead and work through, asking questions if need be.

Part 5 - sudo make me a sandwich

Perform the following exercise on your AWS instance.

- **Useful commands for this part: sudo**
1. As the ubuntu user, in the ubuntu user's home directory, make a file with sudo named `madewithsudo.txt`
 2. As the root user, in the ubuntu user's home directory, make a file with named `madewithroot.txt`
 3. Describe / compare the ownership and permissions associated with `madewithsudo.txt` and `madewithroot.txt`
 4. Determine which account (root, ubuntu, and B0B) can view or edit or changes permissions to:
 - Contents inside of share
 - `madewithsudo.txt`
 5. Modify the permissions and ownership to make ubuntu the owner and squad the group associated with `madewithsudo.txt`. Give both the ability to view and edit the file.
 6. Determine why ubuntu can use sudo, but B0B cannot. Find, implement, and test a way to fix this.

Have a Good Weekend

Don't hesitate to reach out and ask questions!

Quote of the week:

"You can catch flies with honey, but you can catch more honeys by being fly"

1:25pm - 2:20pm

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