

Name _____

GitHub Workshop Lab Guide - Windows

Your Tasks (Mark these off as you go)

- ☐ Define key vocabulary
- ☐ Create a GitHub account
- ☐ Install Git on your computer
- ☐ Configure your username and email
- ☐ Install Visual studio code
- ☐ Clone a repository
- ☐ Complete your assignment with Visual Studio Code
- ☐ Push changes to a repository
- ☐ Receive credit for this lab guide

☐ Define key vocabulary

- Open up your browser and search for definitions to the following terms as they relate to “Git”. For example you could type “Git vocabulary”.
- Work with your partner to write definitions for the following terms.

Git	a version control system used for tracking changes in computer files
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GitHub	a web-based version-control and collaboration platform for software developers
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repository	a storage location for software packages
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local	to run it on the machine you are sitting at
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remote	a software- or operating system feature that allows a personal computer's desktop environment to be run remotely off of one system
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stage	a nearly exact replica of a production environment for software testing
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commit	the making of a set of tentative changes permanent, marking the end of a transaction and providing Durability to ACID transactions
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push	a function that adds one or more elements to the end of an array
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clone	copy the values of an object or source code of an application program to another without the need for writing the explicit code
fork	to take the source code from an open source software program and develop an entirely new program
pull	a style of network communication where the initial request for data originates from the client, and then is responded to by the server
origin/master	used to deal with the remote repository
Gitpod	an open source developer platform automating the provisioning of ready-to-code developer environments

❑ Create a GitHub account

<p>Navigate to the following address,</p> <p>https://education.github.com/students</p> <p>Locate the <i>Get Benefits for Students</i> button and click on it.</p>	<p>Home / Students</p> <h2>With GitHub Education, your work will speak for itself.</h2> <p>Build your portfolio, grow your network, and level up your skills.</p> <p>Get benefits for students</p>
<p>Locate the <i>Create an account</i> link and click on it.</p> <p>Create your account when prompted</p>	 <p>Sign in to GitHub to continue to GitHub Education</p> <p>Username or email address</p> <input type="text"/> <p>Password Forgot password?</p> <input type="password"/> <p>Sign in</p> <p>New to GitHub? Create an account.</p>

❑ Install Git on your computer

If you are using a Pluska issued computer with a Linux OS, you may skip this section

Navigate to <https://git-scm.com/downloads> and download Git

Downloads



Mac OS X



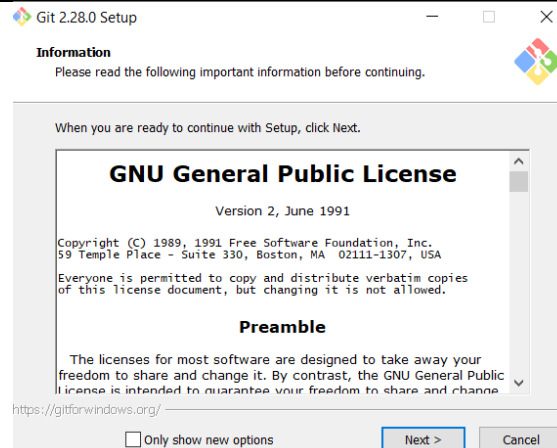
Windows



Linux/Unix

Older releases are available and the Git source repository is on GitHub.

Locate the file and install per your operation system



❑ Install Visual Studio Code

If you are using a Pluska issued computer with a Linux OS, you may skip this section

Navigate to <https://code.visualstudio.com/download> and download Visual Studio Code

Download Visual Studio Code

Free and built on open source. Integrated Git, debugging and extensions.



Windows

User Installer 64 bit 32 bit ARM
System Installer 64 bit 32 bit ARM
zip 64 bit 32 bit ARM



.deb

.rpm

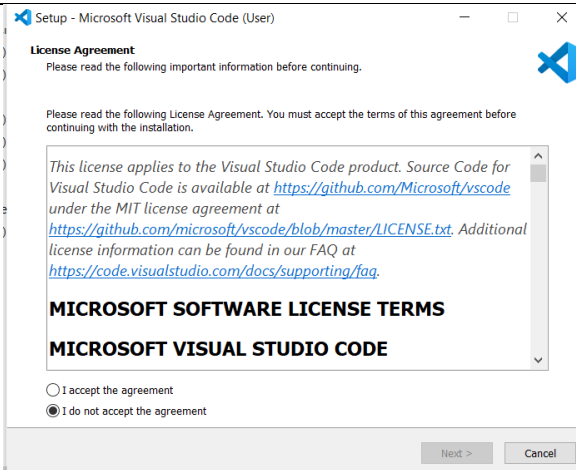
deb 64 bit
rpm 64 bit
tar.gz 64 bit



Mac

macOS 10.10+

Locate the file and install per your operation system



□ Configure your username and email

Log in to GitHub and locate your no-reply email

- Click on *Settings* from your start menu
- In the left menu, click on *Emails*
- In the Primary Email Address section copy the no-reply email provided in the text

The screenshot shows the GitHub user interface for a user named 'hpluska'. A dropdown menu is open from the user profile icon, showing options like 'Set status', 'Your profile', 'Your repositories', 'Your organizations', 'Your projects', 'Your stars', 'Your gists', 'Feature preview', 'Help', 'Settings' (highlighted in blue), and 'Sign out'. Below this, the 'Public profile' section is visible, showing the name 'Pluska' and a bio 'Computer Science Instructor and Recreational Hacker'. The 'Emails' section is highlighted with a red circle, showing a list of email addresses. The 'Primary email address' is also highlighted with a red circle, showing 'heidi.pluska@gmail.com' with a 'Save' button.

Open a Terminal

- Open Visual Studio Code
- From the menu at the top, select *Terminal, New Terminal*

The screenshot shows the Visual Studio Code interface. The 'Terminal' menu is open, showing options like 'New Terminal' (Ctrl+Shift+'), 'Split Terminal' (Ctrl+Shift+5), 'Run Task...', 'Run Build Task...' (Ctrl+Shift+B), 'Run Active File', 'Run Selected Text', 'Show Running Tasks...', 'Restart Running Task...', 'Terminate Task...', 'Configure Tasks...', and 'Configure Default Build Task...'. The 'EXPLORER' sidebar on the left shows a project structure with folders like 'OPEN EDITORS', 'GITHUBWORKSHOP', 'OUTLINE', 'TIMELINE', 'JAVA PROJECTS', and 'MAVEN'.

Set the Git commit username and email on your local computer to the ones you used on your GitHub account.

- Locate the terminal window at the bottom of the screen.
- At the terminal prompt, type the following command, paste the email you just copied in between the quotes, then hit *Enter*.

```
git config --global
user.email "paste the
email you just copied
here"
```

- To set your username, copy the following command, type your GitHub username in the quotes, then hit *Enter*.

```
git config --global
user.name "paste your
username here"
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

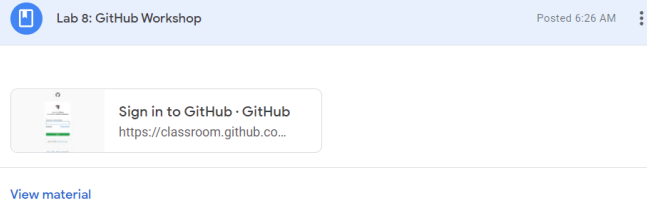
```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

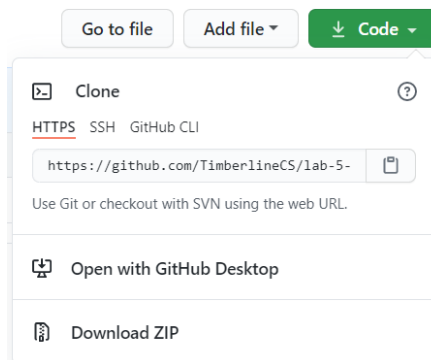
PS C:\Users\heidi> |
```

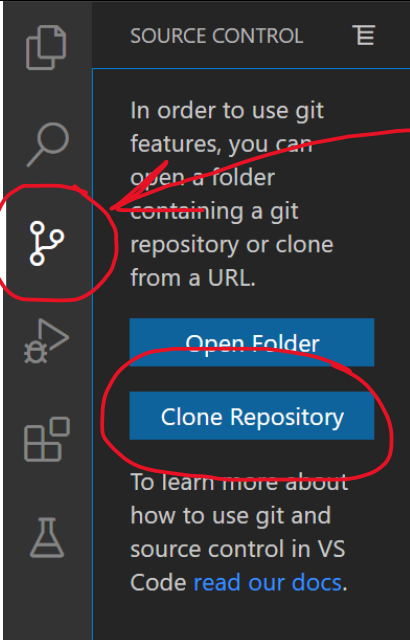
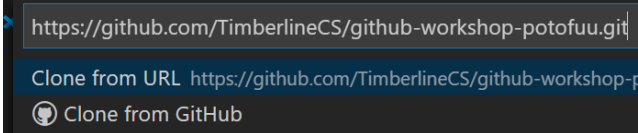
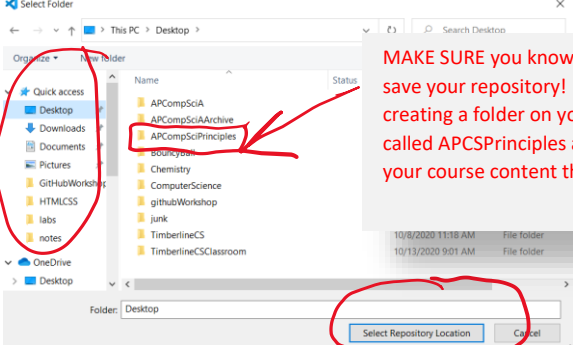
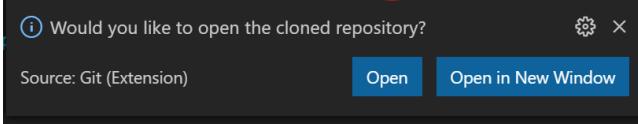
□ Clone a repository

Navigate the classroom and locate the assignment. Accept the assignment you have been assigned using the link provided by Pluska.

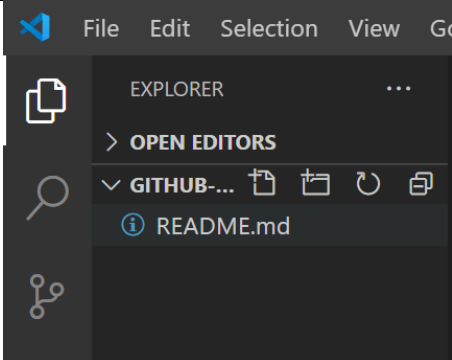
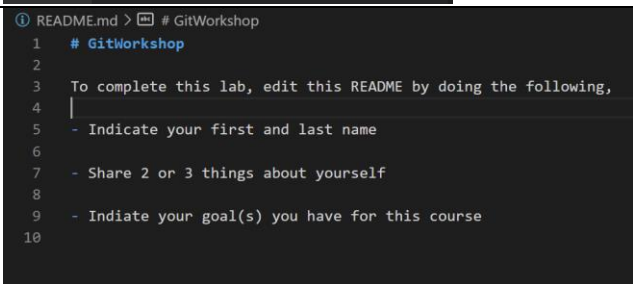


In the GitHub assignment repository you just accepted, locate the Code button and copy the https link

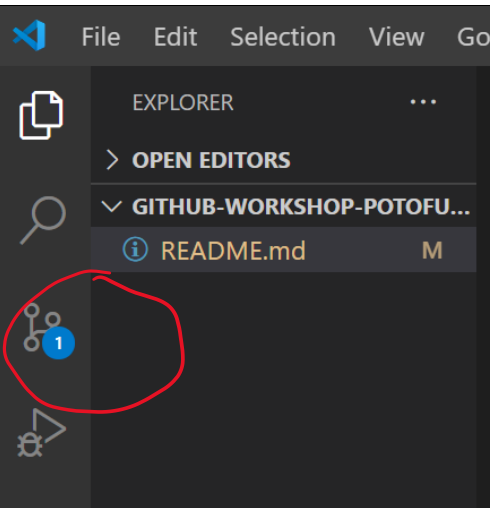
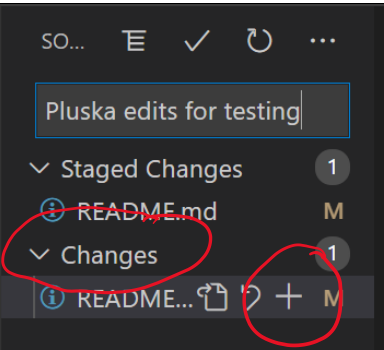


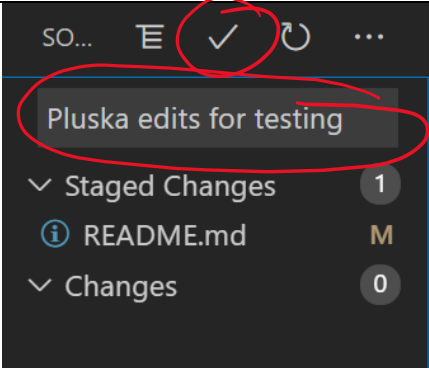
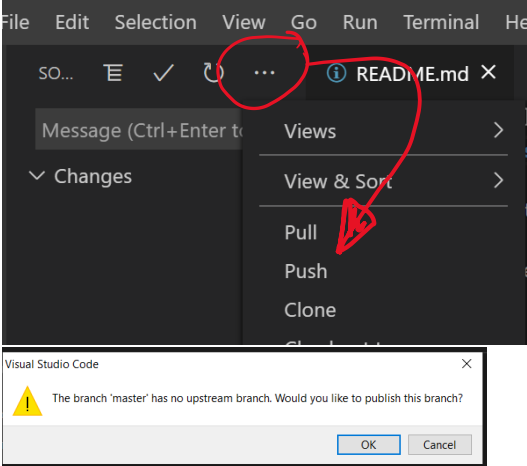
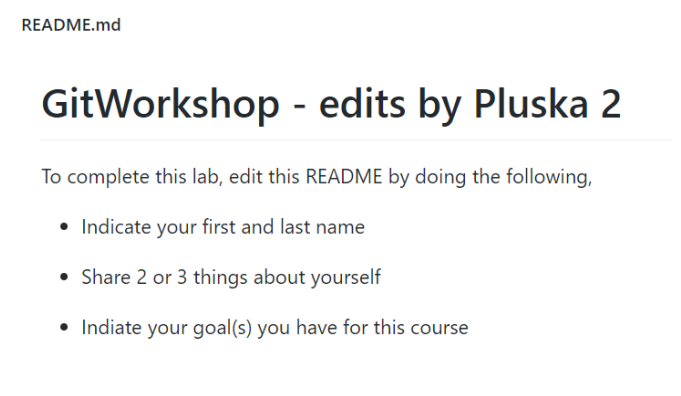
<p>Return to Visual Studio Code</p> <ul style="list-style-type: none"> - Click on the <i>Control Source</i> icon in the left menu - Click on the <i>Clone Repository</i> button 	 <p>Control Source</p>
<p>Locate the text box at the top of the window and paste the URL to the repository you just copied, then click <i>Enter</i></p>	
<p>Navigate to where you would like to store the repository.</p> <p>The click <i>Select Repository Location</i></p>	 <p>MAKE SURE you know where you save your repository! I recommend creating a folder on your computer called APCSPinciples and storing all your course content there.</p>
<p>In the bottom right corner of the screen locate the <i>Would you like to open the cloned repository?</i> Window. Click the <i>Open</i> button</p>	

□ Complete your assignment with Visual Studio Code

<p>- Locate the <i>README.md</i> file in the left menu and click on it.</p>	 A screenshot of the Visual Studio Code interface. The Explorer sidebar on the left shows a file tree with 'README.md' selected. The main editor area is empty.
<p>The file you clicked on is now open in the editor window. Answer the prompts. When you are done, type <i>ctrl-s</i> to save your file. You can also save your file by selecting <i>Save</i> from the <i>File</i> menu.</p>	 A screenshot of the Visual Studio Code editor showing the content of 'README.md'. The text includes a title '# GitWorkshop' and a list of instructions: 'To complete this lab, edit this README by doing the following, - Indicate your first and last name - Share 2 or 3 things about yourself - Indiate your goal(s) you have for this course'. Line numbers 1 through 10 are visible on the left.

□ Push changes to a repository

<p>After you save the file you have changed, a blue circle with a number will appear on the Source Control icon. This means you have 1 pending change to push to GitHub. Click on the source control icon to open the Git menu.</p>	 A screenshot of the Visual Studio Code interface. The Source Control icon in the left sidebar is circled in red. It has a blue circle with the number '1' next to it. The Explorer sidebar shows 'README.md' with a status of 'M'.
<p>Pushing your work back to GitHub is a three part process – Stage, Commit, Push.</p> <p>You will notice Visual Studio Code tracks the changes you have made to files. Locate the file you just changed under the <i>Changes</i> tab. Then click the plus sign next to it to stage your changes.</p>	 A screenshot of the Visual Studio Code Source Control panel. The 'Changes' tab is selected, showing 'README.md' with a status of 'M'. A plus sign icon next to the file is circled in red. The 'Staged Changes' section above it also shows 'README.md' with a status of 'M'.

<p>To commit your changes you must first type a message in the dialogue box. This message should be descriptive and brief. Click the check mark when done.</p>	
<p>To push your changes back to GitHub, select Push from the Source Control menu. Access this by clicking on the 3 dots.</p> <p>If you see the warning message, just click <i>OK</i>. You should only see this the first time you push.</p>	
<p>Now return to your GitHub assignment repository and refresh the page. Check out your edited file!</p> <p>BAM!</p> <p>Thanks to <i>potufuu</i> for allowing me to use their assignment as an example!</p>	

□ Receive Credit for this lab guide

Submit this portion of the lab to Pluska to receive credit for the lab guide. Once received, your completed README will also be graded and will count towards your final lab grade.