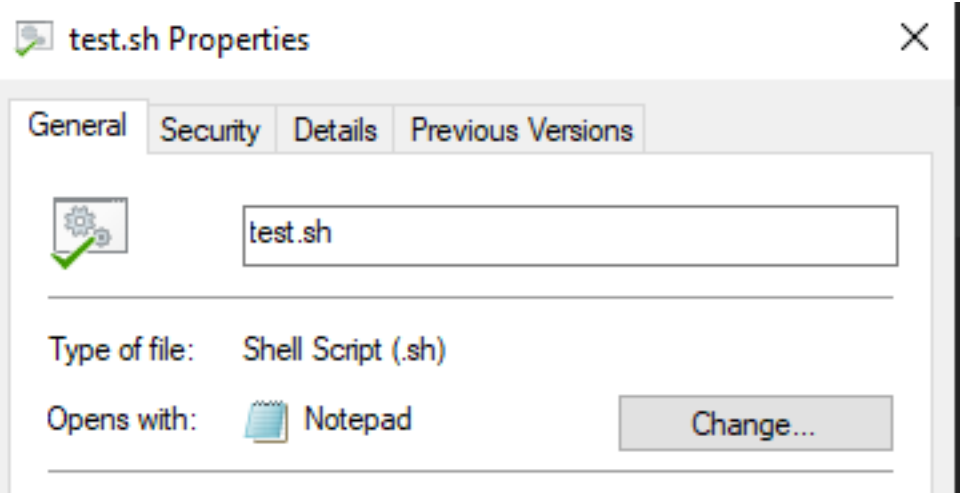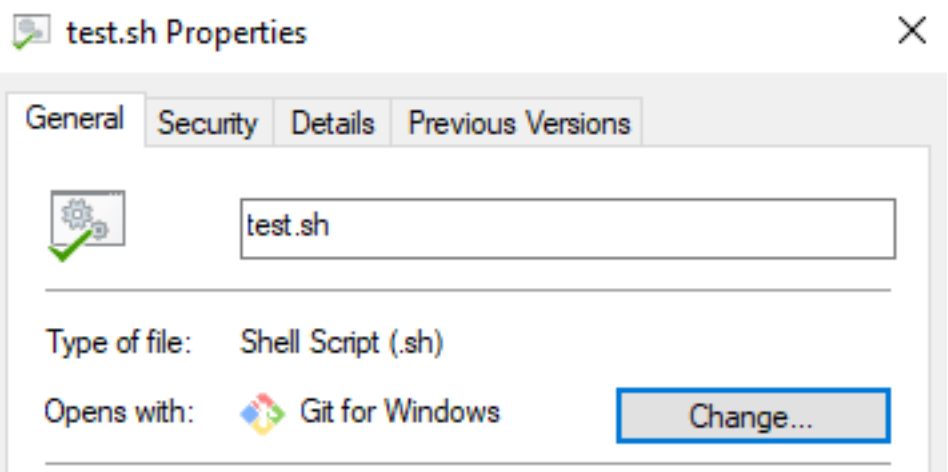# Docker & Github Setup

Foreword

The goal of this setup is to provide you instructions for setting up a working development environment on your computer. You will use this to develop programs and complete assignments for this course. If you have multiple computers, install this on the computer you are most comfortable with.

Directions

1. Download and install the latest version of docker from: [https://docs.docker.com/get-docker/ (Links to an external site.)](https://docs.docker.com/get-docker/)
    0. You can view a getting started and overview from: [https://docs.docker.com/get-started/overview/ (Links to an external site.)](https://docs.docker.com/get-started/overview/)
2. Make sure you can login and have access to the school's github repository: [https://github.gatech.edu/ (Links to an external site.)](https://github.gatech.edu/)
    0. GaTech's github enterprise support page: [https://support.cc.gatech.edu/support-tools/faq/what-gt-github-enterprise (Links to an external site.)](https://support.cc.gatech.edu/support-tools/faq/what-gt-github-enterprise)
    1. You can learn more about how to use github from: [https://docs.github.com/en/enterprise/2.20/user/github/getting-started-with-github/quickstart (Links to an external site.)](https://docs.github.com/en/enterprise/2.20/user/github/getting-started-with-github/quickstart)
3. Setup the Java environment you prefer:
    0. [https://www.eclipse.org/downloads/ (Links to an external site.)](https://www.eclipse.org/downloads/)
    1. [https://www.jetbrains.com/idea/download/ (Links to an external site.)](https://www.jetbrains.com/idea/download/)
        0. Student GaTech licenses are free you can apply here: [https://www.jetbrains.com/community/education/#students (Links to an external site.)](https://www.jetbrains.com/community/education/#students)
    2. Others as you prefer.
4. How to use github with your IDE:
    0. [https://wiki.eclipse.org/EGit/User_Guide#GitHub_Tutorial (Links to an external site.)](https://wiki.eclipse.org/EGit/User_Guide#GitHub_Tutorial)
    1. [https://www.jetbrains.com/help/idea/version-control-integration.html (Links to an external site.)](https://www.jetbrains.com/help/idea/version-control-integration.html)
        0. [https://www.jetbrains.com/help/idea/set-up-a-git-repository.html (Links to an external site.)](https://www.jetbrains.com/help/idea/set-up-a-git-repository.html)
5. If you prefer git bash
    0. [https://git-scm.com/downloads (Links to an external site.)](https://git-scm.com/downloads)
6. Information and access to assignments will be given later when the assignment releases. Please have your account setup in github as soon as possible with your main gatech email that is associated with the roster which we will also use for assignment 1 & the CATME survey.
7. For those wondering how I (Matt) had my environment setup for windows:
    0. I did install
        0. git: [https://git-scm.com/downloads (Links to an external site.)](https://git-scm.com/downloads)
        1. docker: [https://docs.docker.com/get-docker/ (Links to an external site.)](https://docs.docker.com/get-docker/)
            0. sign in & create an account
        2. wsl2: [https://docs.microsoft.com/en-us/windows/wsl/install-win10#step-4---download-the-linux-kernel-update-package (Links to an external site.)](https://docs.microsoft.com/en-us/windows/wsl/install-win10#step-4---download-the-linux-kernel-update-package)
            0. I linked to step 4, you may need to follow the guide from step 1
        3. intellij: [https://www.jetbrains.com/community/education/#students (Links to an external site.)](https://www.jetbrains.com/community/education/#students)
            0. For integrating github to clone the repo check: [https://www.jetbrains.com/help/idea/2016.2/registering-github-account-in-intellij-idea.html (Links to an external site.)](https://www.jetbrains.com/help/idea/2016.2/registering-github-account-in-intellij-idea.html) for setting up a token so you do not need the 2fa every time.
        4. githubdesktop: [https://desktop.github.com/ (Links to an external site.)](https://desktop.github.com/)
    1. I configured intellij to use powershell as the default terminal
        0. [https://itnext.io/how-to-use-powershell-as-default-terminal-in-intellij-vscode-windows-power-user-menu-ba512e68b566 (Links to an external site.)](https://itnext.io/how-to-use-powershell-as-default-terminal-in-intellij-vscode-windows-power-user-menu-ba512e68b566)
    2. I installed posh-git for powershell
        0. [https://git-scm.com/book/en/v2/Appendix-A%3A-Git-in-Other-Environments-Git-in-PowerShell (Links to an external site.)](https://git-scm.com/book/en/v2/Appendix-A%3A-Git-in-Other-Environments-Git-in-PowerShell)
    3. I set my sh files to open by default with git for windows (to not need the prefixing sh commands to run example.sh files.
        0. ex: if your sh files open with notepad you would need "sh .\example.sh"

0.
1. ex if your sh files open with git for windows you can just do ".\example.sh"

0.
1. My git for windows looks to be: "C:\Program Files\Git\git-bash.exe" which appears to be from an install of: https://git-scm.com/download/win (Links to an external site.)