

CS 235 - CS50 IDE set-up

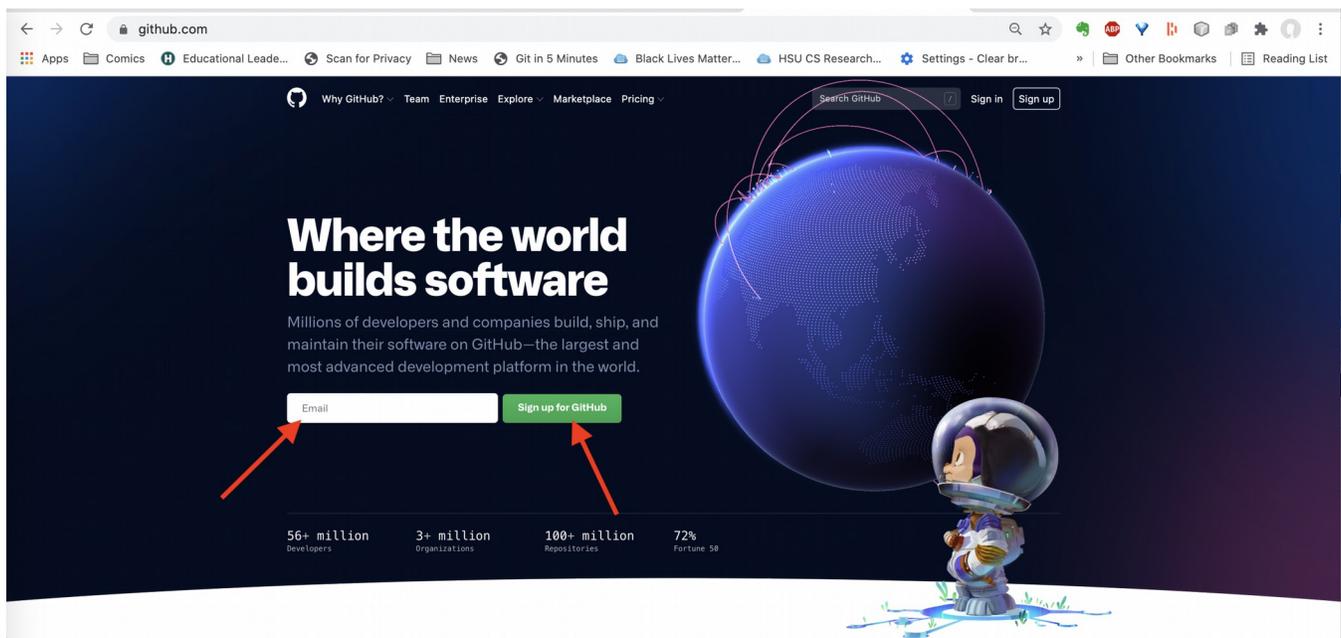
Part 1 - GitHub account

- The CS50 IDE is a browser-based, cloud-based programming integrated development environment (IDE) from Harvard University that supports Java as well as quite a few other languages! It is located at:

<https://ide.cs50.io/>

- The CS50 IDE is free to use, but you do need a (free!) GitHub account to sign in and use it.
- Do you NOT have a GitHub account yet? Then sign up for one at:

<https://github.com>



- OPTIONAL: If you would like, you can check out the free **GitHub Student Development Pack** available from <https://education.github.com/pack>
- ONCE you have your GitHub username and password handy, you are ready to go on to **Part 2**.

Part 2 - Log into CS50 IDE

- THEN: try logging into the CS50 IDE:
 - below is from <https://cs50.readthedocs.io/ide/online/> - "Getting Started"
 - (You have already taken care of step 1, creating a GitHub account if you did not already have one.)
 - 2. Visit <https://ide.cs50.io/>

- 3. Click Sign in with GitHub then login into your GitHub account and authorize the CS50 IDE GitHub app if prompted.
- 4. Once you log in, you will automatically be forwarded to CS50 IDE! Hereafter, you may simply return to ide.cs50.io to log in and return to CS50 IDE, where all your files and settings are preserved.
- Fun fact: do you like dark mode?
 - Go to CS50's **View** menu, select **Dark Mode**. You're welcome.

Basics / Getting Started

- You can click the little green circle with a + in it to open a **New File** (for a new `.java` file) or **New Terminal** (to compile your `.java` file into Java bytecode, and, if that `.java` happens to be for a **non-GUI** Java application, to run that application).
 - You need to **SAVE your file with a `.java` suffix** to get Java syntax coloring! Control-S on Windows or Command-S on Mac should let you save AND give your file a name.
 - Remember, Java source code files **MUST** be named the exact name of the public class defined in that file, with a `.java` suffix.
- Each time you want to **COMPILE** your `.java` source code file to Java bytecode file(s), go to a Terminal.
 - You can **RIGHT-CLICK** (on Mac, control-click) on your file's name in the file tree on the left and select **Open Terminal Here** to make sure you have a Terminal that is open to the **SAME** folder that your file is in!
 - **IN** this Terminal, for a `.java` source code file named `MyJavaClass.java`, this will compile that Java source code into Java bytecode file(s) if you have no syntax errors:

```
javac MyJavaClass.java
```
 - **IN** this Terminal, *if* `MyJavaClass` happens to be a **non-GUI** Java application class, then you can execute this application with:

```
java MyJavaClass
```
- To save a copy of one of your files to, say, your own computer, or to Google Drive:
 - **RIGHT-CLICK** again on the file's name on the left-hand side
 - **SCROLL** down, and select "**Download**" to download a copy of that file to the local or Google drive folder of your choice.
 - (THIS copy can then be submitted to Canvas, for example.)

Convenient tips!

- To compile **again**, while in your Terminal, you can **type the up-arrow key** to scroll through previous commands, bring up your previous compile command, and type Enter to re-do that. (going through the command **history**)
- While in your Terminal, you can enter the command:

```
clear
```

...to clear the Terminal screen.

- (w/thanks to M. Crispin and N. Glick!) You can **COMMENT** or **UNCOMMENT** many lines as follows:
 - highlight the lines to be commented or uncommented
 - select **Edit** menu -> **Comment** -> **Toggle Comment**
OR type (Windows) ctrl - / or (Mac) command - / [this means to type those 2 keys at the SAME time]
 - (repeat as desired to comment or uncomment or comment or uncomment...)
- (w/thanks to M. Crispin and N. Glick!) You can **INDENT** or **UNINDENT** (CS50 calls this "OUTDENT") many lines at once by:
 - highlighting the lines to be indented or outdented
 - select **Edit** menu -> **Line** -> **Indent**
OR type the **tab** key,
...to indent them, or
 - select **Edit** menu -> **Line** -> **Outdent**
OR type the **shift** and **tab** keys at the same time
...to UNindent/outdent them!