



Home Install for Mac, Windows, and Linux

Mr. Eliot, Yorba Linda High School, 09-02-2018

WARNING:

While we have tested this installation on **Mac and Windows**, Mr. Eliot, Yorba Linda High School, and the Placentia-Yorba Linda Unified School District make no guarantees that the software discussed here will install properly on your home system. This home installation is optional, and you do it at your own risk.

INSTRUCTIONS:

(1) Download and install **JGrasp**. Please visit the download link below (you DO NOT have to fill out the survey, just download near the bottom of the page). Select either the **Windows**, **Mac OS X**, or **Linux/Unix** version depending on your system.

https://spider.eng.auburn.edu/user-cgi/grasp/grasp.pl?;dl=download_jgrasp.html

(2) Visit Mr. Eliot's website, and go to the File Downloads for AP Comp Sci. In the Downloads folder for AP Comp Sci., you will find **JavaStuff.zip**. Download **JavaStuff.zip** and extract the folder inside. A good place to put this folder is on your desktop. Please REMEMBER where you put the contents of **JavaStuff.zip**. You will need it for Step #4!!

<http://files.mreliot.com/>

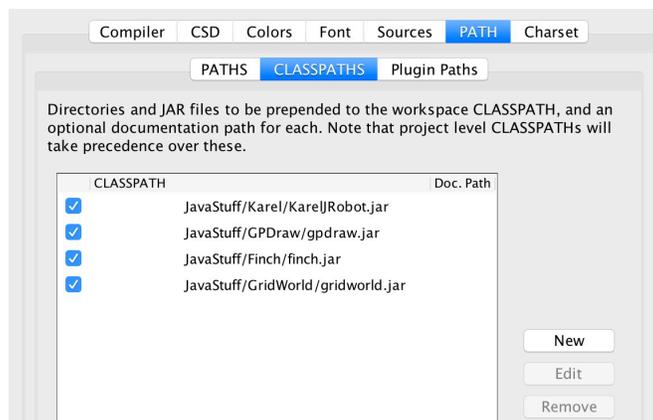
(3) Next, you may need to install the **Java Development Kit (JDK)** on your computer. This is the largest install, and it allows your computer to COMPILE and RUN Java programs. Without it, nothing will work. If you have a Mac computer, you **DO NOT** need to do this, Java is already installed. If you have a Windows or Linux computer, you **DO** need to do this. Visit the Oracle website to download and install the JDK for your system. For Windows 7 / Windows 10 select the "Windows x64" option from the first group:

<http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>

(4) OK, the most critical step! Here, you need to allow JGrasp to find the JAR files that allow Karel, GPDraw, Gridworld, and The Finch robot to work. In JGrasp, go to **Settings** → **PATH / CLASSPATH** → **Workspace**. Then select **PATH** → **CLASSPATHS** from the menu buttons (see the image below). This is where the JavaStuff folder comes in from Step #2, you need to BROWSE and ADD each of the following four JAR files to the CLASSPATH. They are all inside the **JavaStuff folder**, depending on where you put it on your computer. Once you do this, you should NOT MOVE the JavaStuff folder!!

JavaStuff/Karel/**KarelJRobot.jar**
JavaStuff/GPDraw/**gpdraw.jar**
JavaStuff/Finch/**finch.jar**
JavaStuff/GridWorld/**gridworld.jar**

Example of how CLASSPATHS might look when you are finished with Step #4:

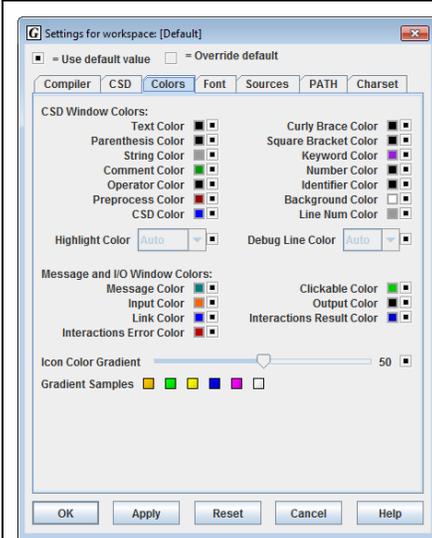


(5) (OPTIONAL) To show line numbers, use **Settings** → **CSD Window Settings** → **Line Numbers**. To set colors like we use in class, use **Settings** → **CSD Window Settings** → **Workspace** → **Colors**. To set the font like we use in class, use **Settings** → **CSD Window Settings** → **Workspace** → **Font**. (See the [next page](#) for the color and font settings that we use in class)

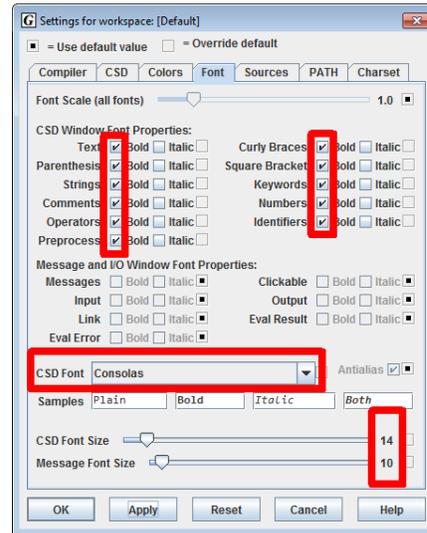
(6) It's time to test everything! **Open, Compile, and Run** the following three files; **DefaultJava.java**, **DefaultKarel.java**, and **DefaultGPDraw.java**. If these three files compile and run without any errors, then your installation is finished! If there are errors, double check that you completed **Step #4** above **PERFECTLY**.

COLOR / FONT / TAB SETTINGS WE USE IN CLASS

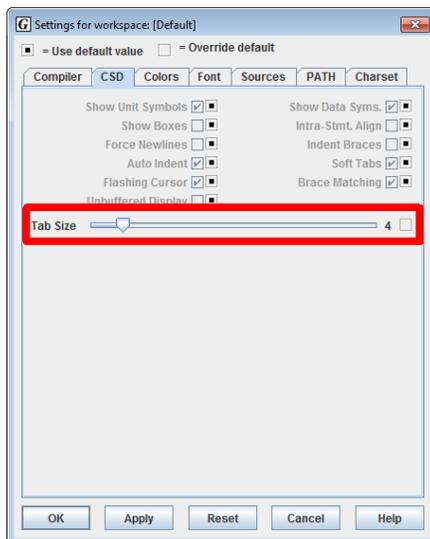
(Settings → CSD Window Settings → Workspace)



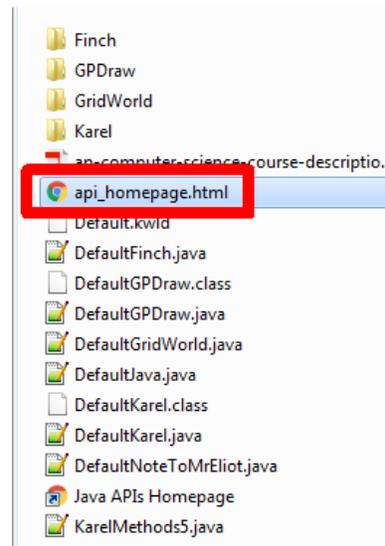
Set your font colors similar to those above, which are the same ones we use for Notepad++ and JGrasp in class. Zoom in to see the colors more clearly.



Set your font to Consolas, Bold similar to the way we do in class. Also, we set Font Size to 14 and Message Font Size to 10 in class.



Set the Tab Size to “4” so that code you create in JGrasp and Notepad++ will align the same way. If you fail to do this, you code may not line up!



When at home, if you want to use the APIs we use in class, just go into the JavaStuff folder, and click on api_homepage.html. This file will open in your web browser, and will have the APIs you want.