

Welcome



Meme Credit: Thomas Rachman, Any Person Any Meme (Facebook)

Getting Started With Eclipse

CS 2112 Fall 2019

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Lab Staff

Monday

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Versions

We recommend Eclipse 2019-06 and Java 11

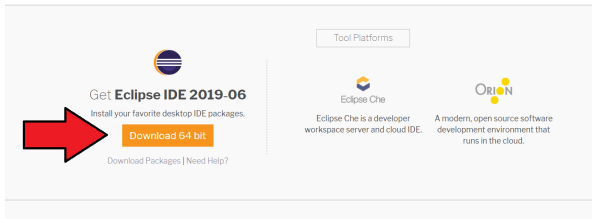


Any relatively new version of Eclipse should be okay.
Any version of Java from 8 through 11 is officially supported.

Step 1

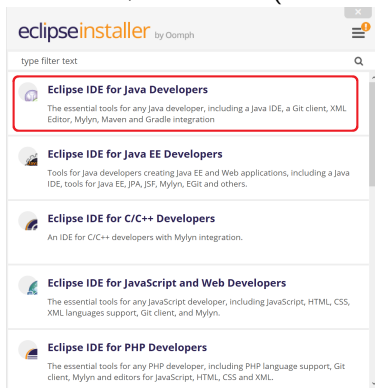
Go to www.eclipse.org/downloads, select

Download Eclipse Technology
that is right for you



Step 2

Run the file as an admin, let it load (it'll take a while), then

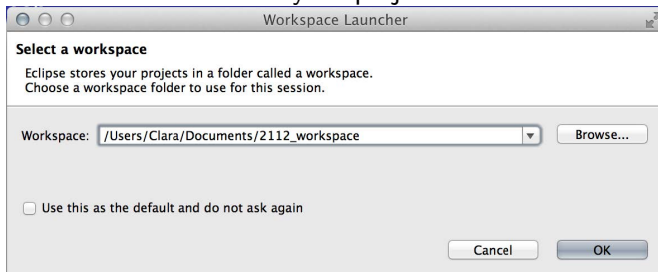


Step 3

Finish installing and launch Eclipse

Step 4

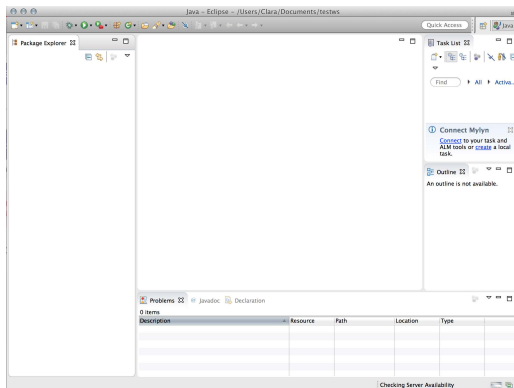
Select a location for your workspace
This is where all of your projects will be stored



We recommend choosing a folder on your desktop or somewhere you will remember.

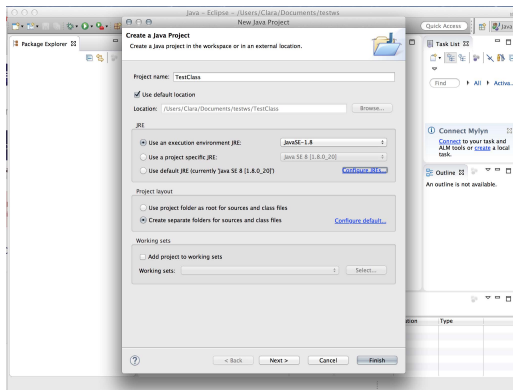
Step 5

Close the Welcome screen. This is the default Java Perspective.



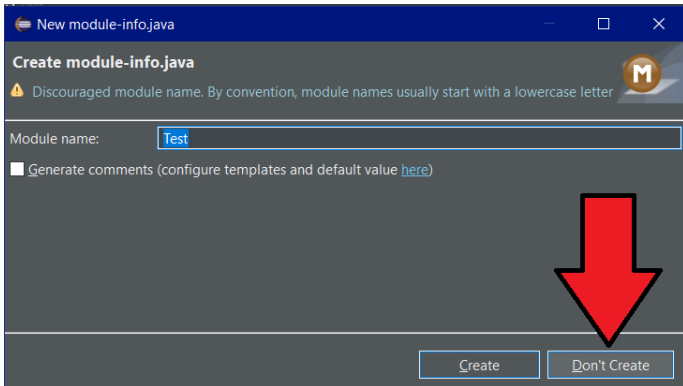
Make A New Project

Make sure to select Java 1.8 or later as the execution environment.



Modules

Click "Don't Create" when asked to create the file `module-info.java`.



This does not apply to Java 8.

Coding Exercise

There is a 4-digit number which, when the order of its digits is reversed, yields a number 4 times greater

Write a program to find and print out this number

- Create a new package
- Create a class with the logic to find the number
- Create a class with a main method that will instantiate the first class and then print out the number

I/O Exercise

Write a program to read user input from the console and print back the user input.

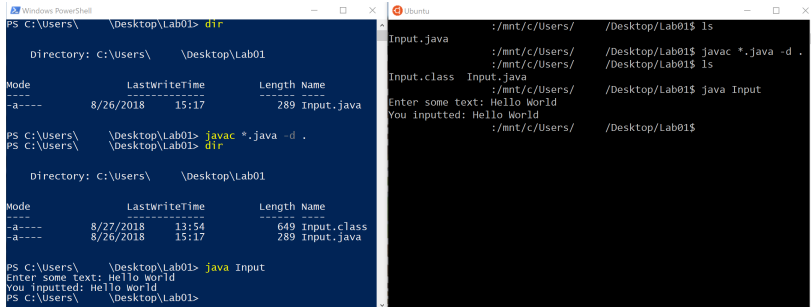
Feel free to reference the IO handout:

<https://courses.cs.cornell.edu/cs2112/2019fa/handouts/IO.pdf>

- Create a new package
- Create a class with a main method that will accept input and echo it back

Command Line

Open up a terminal emulator (varies depending on your OS) and compile/run your program from the command line



```
Windows PowerShell
PS C:\Users\...\Desktop\Lab01> dir

Directory: C:\Users\...\Desktop\Lab01

Mode                LastWriteTime         Length Name
----                -
-a----            8/26/2018    15:17             289 Input.java

PS C:\Users\...\Desktop\Lab01> javac *.java -d .
PS C:\Users\...\Desktop\Lab01> dir

Directory: C:\Users\...\Desktop\Lab01

Mode                LastWriteTime         Length Name
----                -
-a----            8/27/2018    13:54             649 Input.class
-a----            8/26/2018    15:17             289 Input.java

PS C:\Users\...\Desktop\Lab01> java Input
Enter some text: Hello world
You inputted: Hello world
PS C:\Users\...\Desktop\Lab01>

Ubuntu
:/mnt/c/Users/.../Desktop/Lab01$ ls
Input.java
:/mnt/c/Users/.../Desktop/Lab01$ javac *.java -d .
:/mnt/c/Users/.../Desktop/Lab01$ ls
Input.class  Input.java
:/mnt/c/Users/.../Desktop/Lab01$ java Input
Enter some text: Hello World
You inputted: Hello World
:/mnt/c/Users/.../Desktop/Lab01$
```

Useful Features Of Eclipse

- Refactoring
- Autocomplete
- Compile & Run
- Autoindent
- Autoformat (Ctrl + Shift + F)
 - We suggest turning on autoformat on save
 - Preferences > Java > Editor > Save Actions > Perform the selected actions on save > Format Source Code > Format edited lines
- Javadoc
- Comments