

**The recommended IDE for this course is Eclipse.**

**Here are some steps to get you started with Eclipse:**

Below is the installation I did a few months ago, so it is dated a bit, and skewed to Windows, but lends the idea of what to do:

1. Alternatively, maybe the jdk is already installed on your computer??? Look for a folder like: "C:\Program Files\Java\jdk1.8.0\_73\bin." This indicates I have on this computer, java development kit for Java 8, release 73.
2. JDK for Java 6, 7, 8, 9 are all just fine for CS210 and CS211.
3. **Download the Java Development Kit (jdk) from [Oracle.com](https://www.oracle.com)** Be certain to select the your correct operating system.
4. **Install the JDK.** It's usually an application (exe) in downloads that you need to run, install, and probably reboot.

The screenshot shows the Oracle Java SE Development Kit 8 Downloads page. The page has a navigation bar with links like Sign In/Register, Help, Country, Communities, I am a..., I want to..., and a Search bar. Below the navigation bar is a breadcrumb trail: Oracle Technology Network > Java > Java SE > Downloads. The main content area is titled "Java SE Development Kit 8 Downloads" and includes a description of the JDK, a list of links to download the JDK for various operating systems, and a table of download links. The table has columns for Product / File Description, File Size, and Download. The table lists download links for Linux ARM 32 Hard Float ABI, Linux ARM 64 Hard Float ABI, Linux x86, Linux x86\_64, Linux x64, Mac OS X, Solaris SPARC 64-bit, Solaris SPARC 64-bit, Solaris x64, Solaris x64, Windows x86, and Windows x64.

Oracle Technology Network > Java > Java SE > Downloads

Overview Downloads Documentation Community Technologies Training

### Java SE Development Kit 8 Downloads

Thank you for downloading this release of the Java™ Platform, Standard Edition Development Kit (JDK™). The JDK is a development environment for building applications, applets, and components using the Java programming language.

The JDK includes tools useful for developing and testing programs written in the Java programming language and running on the Java platform.

See also:

- [Java Developer Newsletter](#): From your Oracle account, select **Subscriptions**, expand **Technology**, and subscribe to **Java**.
- [Java Developer Day](#) hands-on workshops (free) and other events
- [Java Magazine](#)

JDK 8u101 Checksum  
JDK 8u102 Checksum

#### Java SE Development Kit 8u101

You must accept the [Oracle Binary Code License Agreement for Java SE](#) to download this software.

☐ Accept License Agreement ☒ Decline License Agreement

Product / File Description	File Size	Download
Linux ARM 32 Hard Float ABI	77.77 MB	<a href="#">jdk-8u101-linux-arm32-vfp-hflt.tar.gz</a>
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Linux x86	160.28 MB	<a href="#">jdk-8u101-linux-i586.rpm</a>
Linux x86	174.96 MB	<a href="#">jdk-8u101-linux-i586.tar.gz</a>
Linux x64	158.27 MB	<a href="#">jdk-8u101-linux-x64.rpm</a>
Linux x64	172.95 MB	<a href="#">jdk-8u101-linux-x64.tar.gz</a>
Mac OS X	227.36 MB	<a href="#">jdk-8u101-macosx-x64.dmg</a>
Solaris SPARC 64-bit	139.66 MB	<a href="#">jdk-8u101-solaris-sparcv9.tar.Z</a>
Solaris SPARC 64-bit	98.96 MB	<a href="#">jdk-8u101-solaris-sparcv9.tar.gz</a>
Solaris x64	140.33 MB	<a href="#">jdk-8u101-solaris-x64.tar.Z</a>
Solaris x64	96.78 MB	<a href="#">jdk-8u101-solaris-x64.tar.gz</a>
Windows x86	188.32 MB	<a href="#">jdk-8u101-windows-i586.exe</a>
Windows x64	193.68 MB	<a href="#">jdk-8u101-windows-x64.exe</a>

**Java SDKs and Tools**

- [Java SE](#)
- [Java EE and Glassfish](#)
- [Java ME](#)
- [Java Card](#)
- [NetBeans IDE](#)
- [Java Mission Control](#)

**Java Resources**

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**Download the Eclipse IDE from [www.eclipse.org](http://www.eclipse.org).** It's usually a zip file (example below), meaning you **MUST EXTRACT** all the files first, then make a shortcut to eclipse.exe as outlined below:

Find the correct "download" for your OS, mine in Win 64 bit:

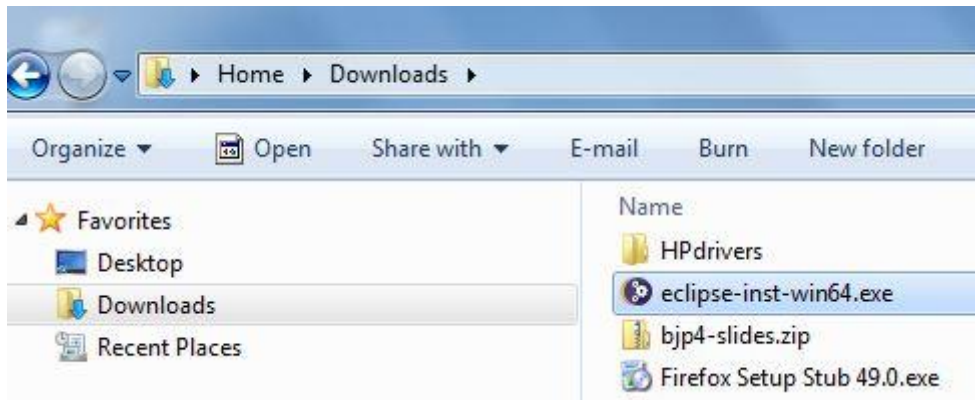


Download Packages

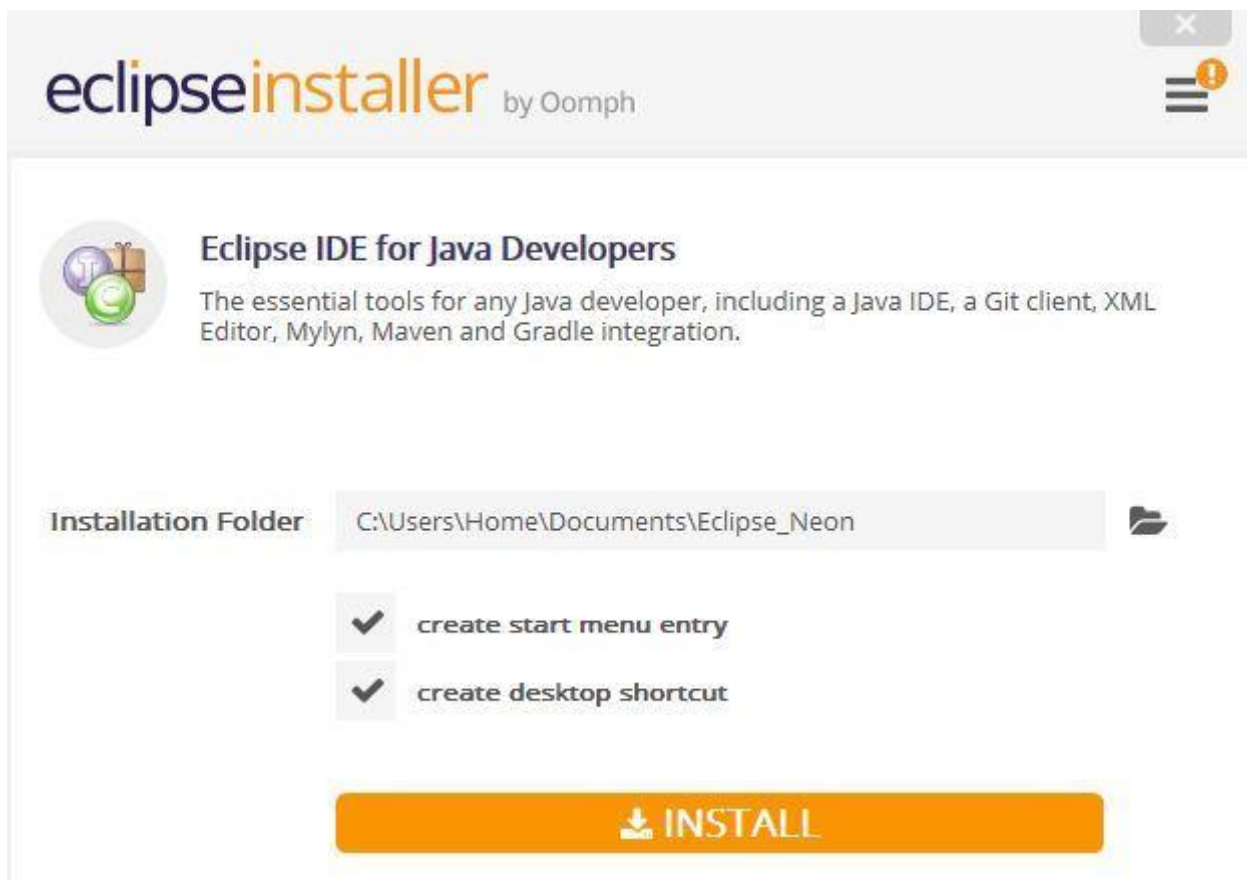
If the download doesn't start in a few seconds, please [click here](#) to start the download.

So that saved an application (exe) as shown below for my PC.

Double click that exe and here we go .....



Here's what my "install" looked like:





## Eclipse IDE for Java Developers

The essential tools for any Java developer, including a Java IDE, a Git client, XML Editor, Mylyn, Maven and Gradle integration.

### Installation Folder

C:\Users\Home\Documents\Eclipse\_Neon



☒ create start menu entry

☒ create desktop shortcut



INSTALLING

Cancel Installation

Which continued into:



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LAUNCH

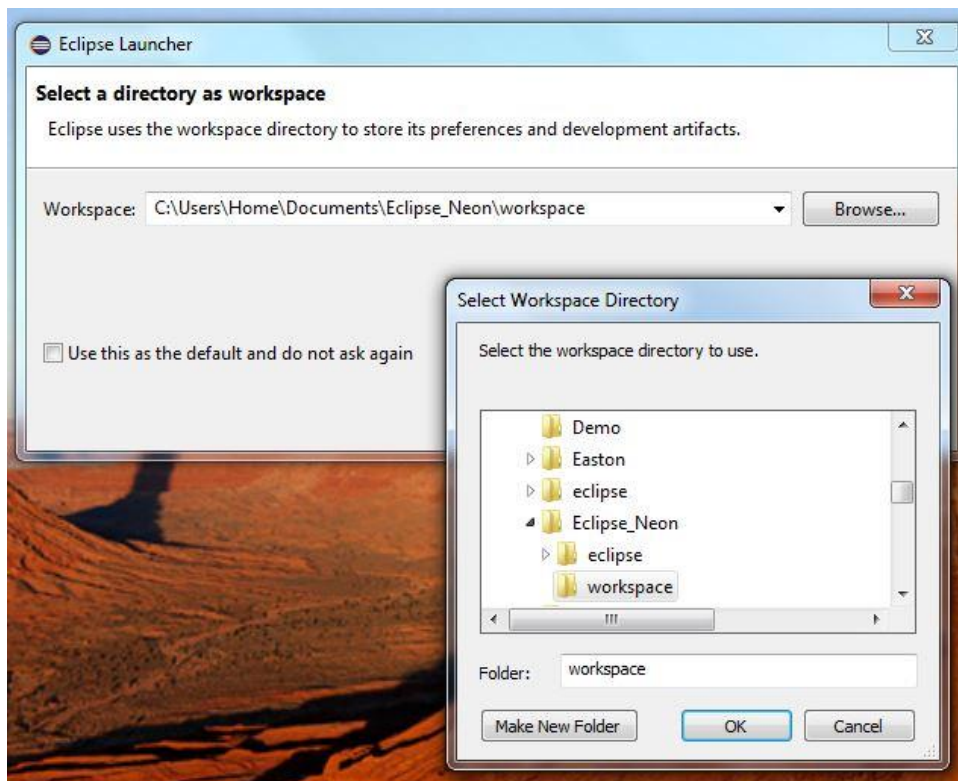
show readme file

open in system explorer

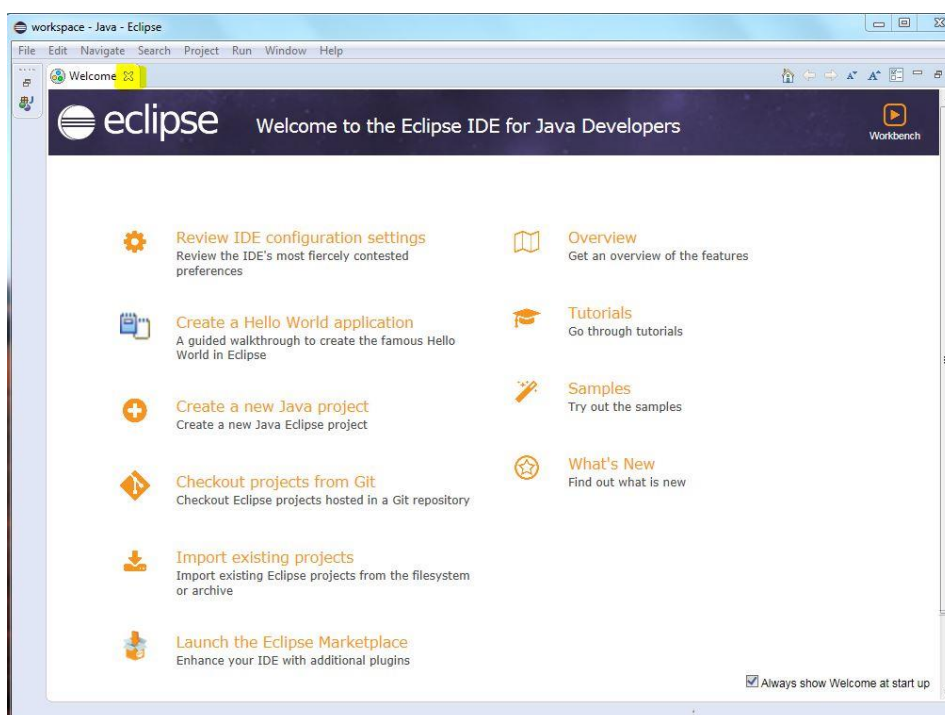
keep installer

Eclipse is NOT a normal Windows install, so proceed with caution. There will be times when you need to know the PATH of these folders. Shown below is probably the most important step of the whole Eclipse install.

You MUST know the path of files where the workspace is installed, else you cannot hand in ASSIGNMENTS and QUIZZES. Know your path, mine looked like:

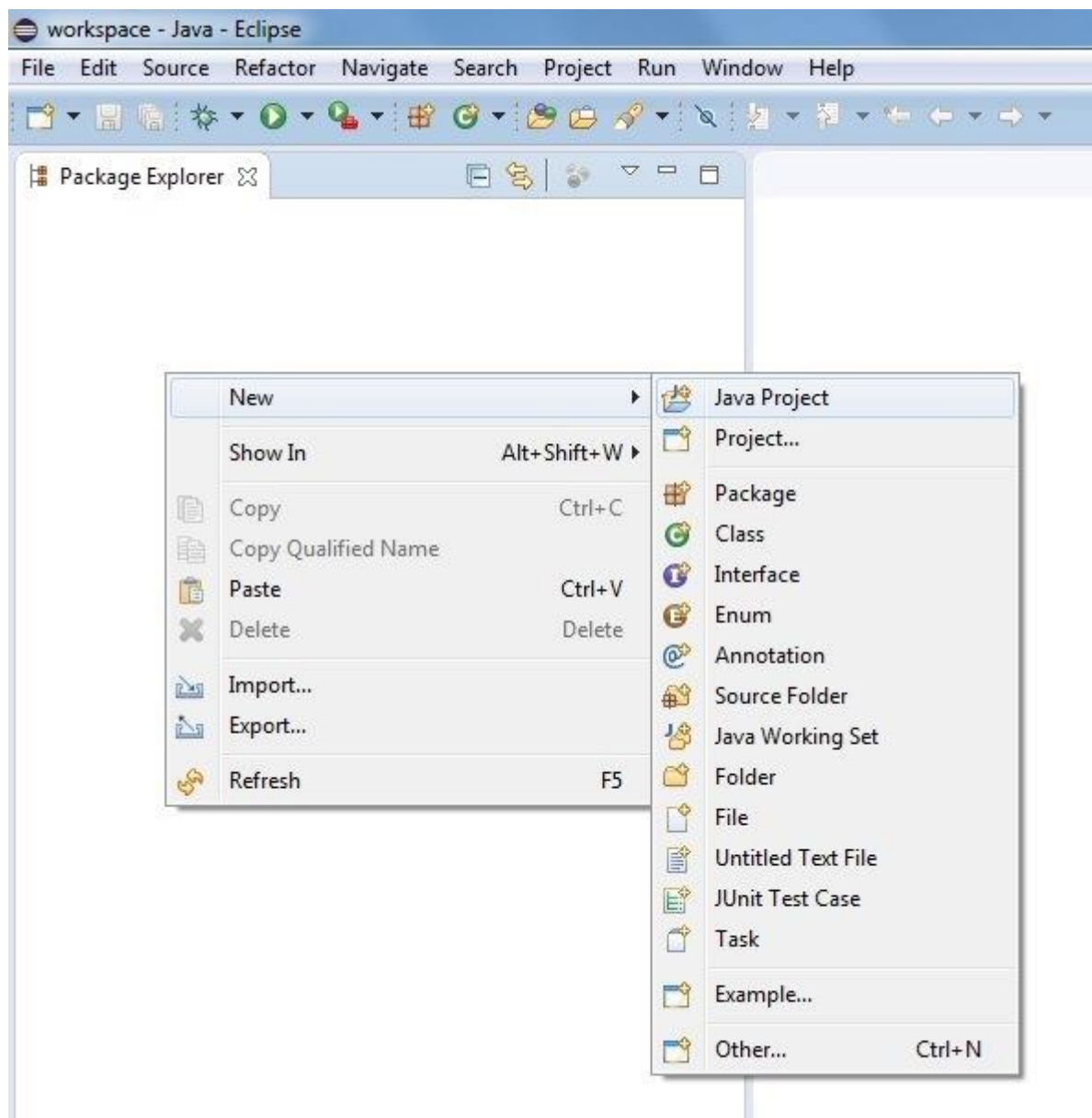


The Eclipse workspace opens and the Welcome message appears.





Close the Welcome message by clicking the "X." Below is the basic Java perspective of Eclipse. Close the Task List and Outline to simplify the workspace environment. Next, right-click in the white space under the package explorer, and select New Java Project:



The **New Java Project** window opens. Type "Chapter01" (without the quotation marks) in the **Project name:** textbox. This creates a Chapter01 folder in the workspace from the first step.

AGAIN: Take note of the complete folder path of the Eclipse workspace. The workspace is where you find your Java files that will be turned in for exams and programming assignments. That workspace folder path is critical to your success in this course.

**New Java Project**

Create a Java project in the workspace or in an external location.

Project name: Chapter01

☒ Use default location

Location: C:\Users\Home\Documents\Eclipse\_Neon\workspace\Chap Browse...

**JRE**

☒ Use an execution environment JRE: JavaSE-1.8

☐ Use a project specific JRE: jre1.8.0\_25

☐ Use default JRE (currently 'jre1.8.0\_25') [Configure JREs...](#)

**Project layout**

☐ Use project folder as root for sources and class files

☒ Create separate folders for sources and class files [Configure default...](#)

**Working sets**

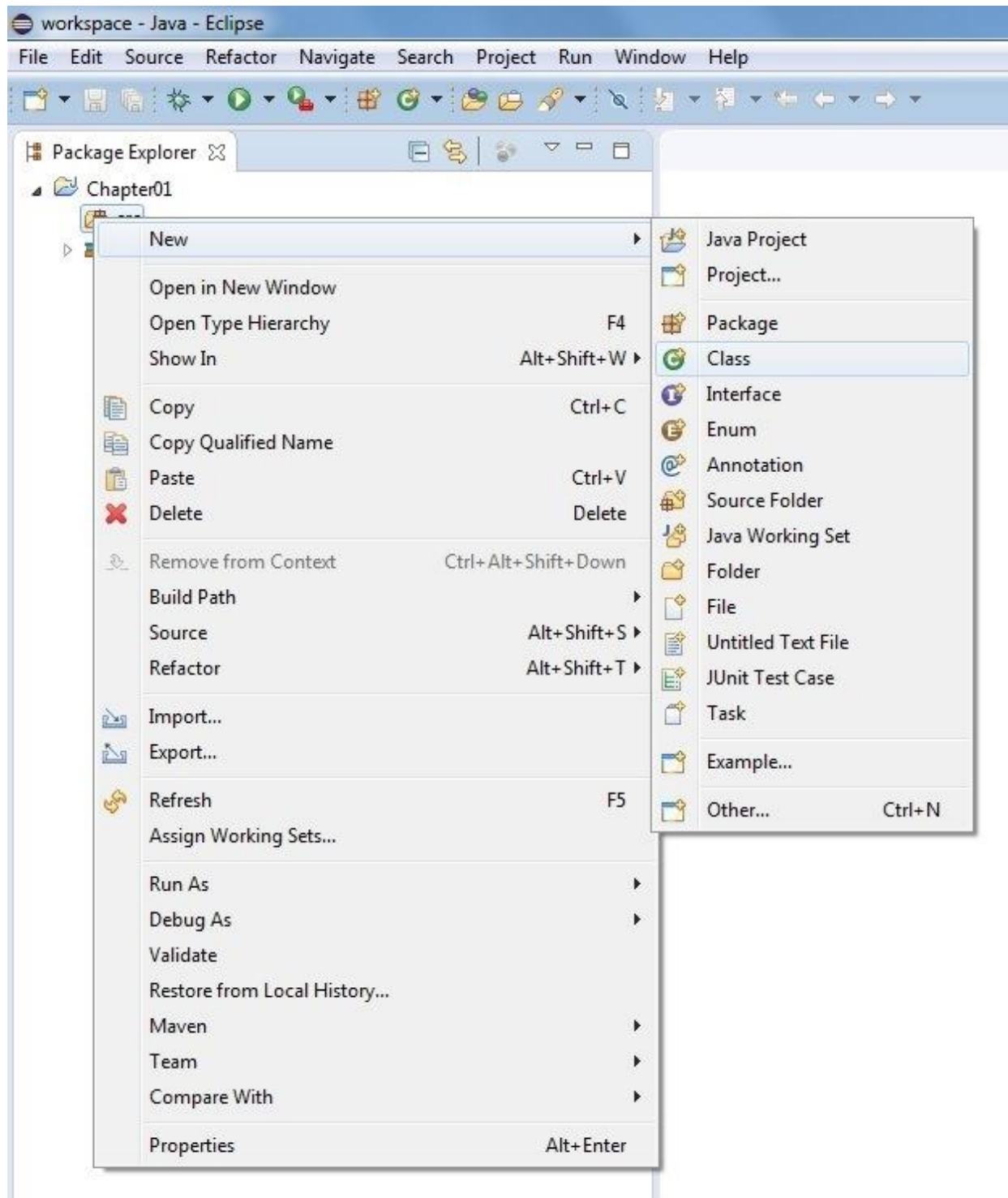
☐ Add project to working sets New...

Working sets: Select...

? < Back Next > Finish Cancel

In the Package Explorer pane on the left side of the workspace, you will see the “src” (source) and “JRE System Library” folders below the “Chapter01” folder.

Right-click on the src folder and the **New Java Class** window opens.





I normally use the "default" folder for CS210, because we do not cover the use of packages. In CS211, the concepts of inheritance, protected fields, package access, and Javadoc organization are covered. Only then, is a package needed.

At this point, a "package" would only just make another folder level to keep track of, so I really always use the default package.

**New Java Class**

**Java Class**

⚠ The use of the default package is discouraged.

Source folder:

Package:

☐ Enclosing type:

---

Name:

Modifiers: ☒ public ☐ package ☐ private ☐ protected  
☐ abstract ☐ final ☐ static

Superclass:

Interfaces:

Which method stubs would you like to create?

☒ public static void main(String[] args)

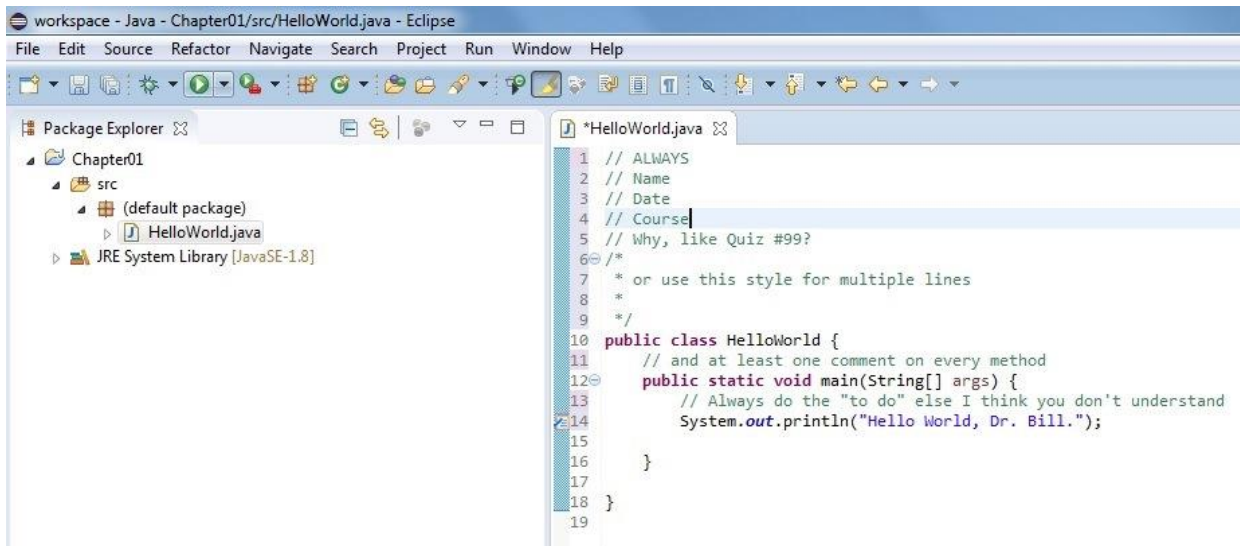
☐ Constructors from superclass

☒ Inherited abstract methods

Do you want to add comments? (Configure templates and default value [here](#))

☐ Generate comments

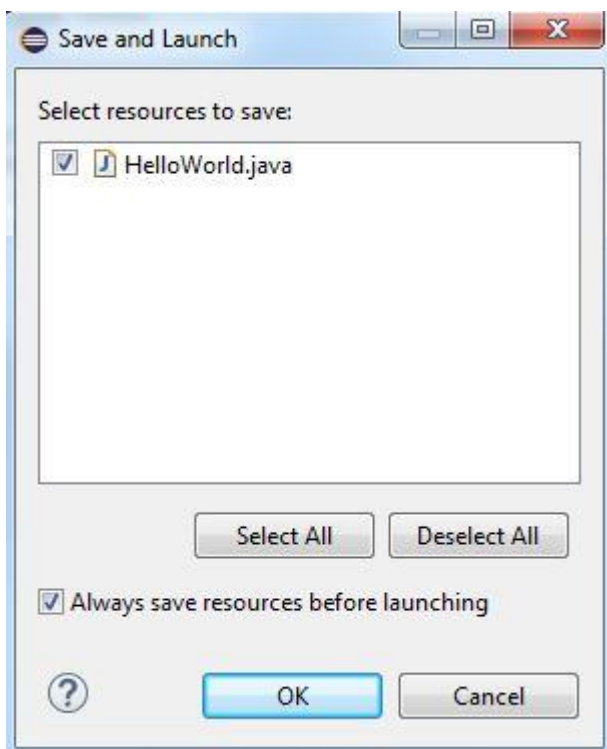
Below is the result after removing the TODO, means I did what I need to do, and typed in what I want for my Hello World program:



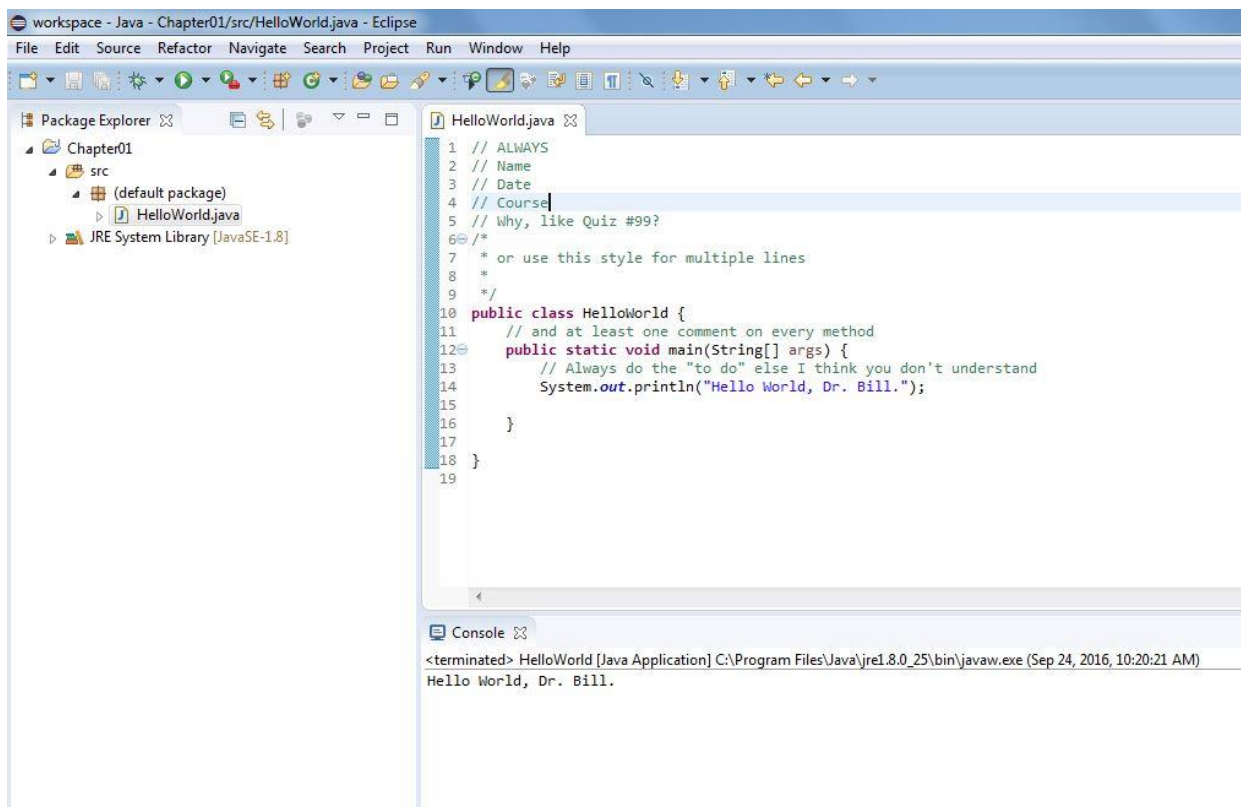
The code is annotated at the top of the file with the following information:

- Your name
- Date
- what you're doing (a description of the purpose of the code segment)
- BC Course (the project to which the code segment belongs)
- additional information (any information that will help you or other developers understand the code)

Click the green run button at the top, and our program launches:



Which means a console window opens up, so I can see what System yields to out:



And I know that someday, you will forget that file path, because I only told you how important it is 3 times over, but it take the stress of an exam to discover that yes I need to know that. So you can simply right-click the file and look at the file properties, here's that path again:

