# **CSE 143: Computer Programming II**

## Getting started with EZclipse

This guide will help you get started with EZclipse and using it to create your first Java file.

#### (1) Installation

Eclipse and the provided CSE Intro tools are compatible for all Windows, Mac, and Linux operating systems, and this guide is not dependent on which one you use. If you run into any errors not noted here, feel free to post your issue on Piazza and we'll help you resolve it.

- (a) First, install the Java Development Kit (JDK) using the installation directions for your operating system. Note: You will need Java 8 for this course, so make sure you update your version of Java if necessary.
- (b) Install the Eclipse IDE using the installation directions for your operating system. Note: You will need the Neon version (or any newer versions) of Eclipse to use these tools.
- (c) Once installed, start Eclipse. The first time you start it, you will see a prompt asking you to select a workspace, as shown in the following example:

elect a directory as workspace	
lipse uses the workspace directory to s	tore its preferences and development artifacts.
Jorkspace:	Browse
Use this as the default and do not ask	again
Recent Workspaces	

A workspace is basically a folder to keep your Java files (and possibly txt files). But we aren't requiring you to deal with these once EZclipse is installed; so, you can just select the default workspace and continue to set-up EZclipse. Once Eclipse is started, go to Help > Install New Software... and the following window should appear:

Nork with:	▼   Add
Find more	software by working with the "Available Software Sites" preference
type filter text	(
Name	Version
□ ① There is no site selected.	
Select All Deselect All Details	
Show only the latest versions of available software	Hide items that are already installed
Show only the latest versions of available software Group items by category	e Ide items that are already installed What is <u>already installed</u> ?
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Click on the Add... button and you should see the following window appear:

8 Add Repository	
Name:	Local
Location: http://	Archive
	Cancel OK

(d) In the input labeled Location, enter

http://courses.cs.washington.edu/courses/cse143/16au/eclipse/site.xml

as the url and click OK. You should then see the following in the Install window:

type filter text				
Name	Version			
🛚 🗹 🎹 UW CSE Intro Eclipse Tools (blank@cs	5)			
Select All Deselect All				

Make sure that the checkbox is checked, and then click Finish to close the pop up. Eclipse should then prompt you to confirm license agreements and finish the installation process, after which you should be prompted to restart Eclipse.

(e) After restarting Eclipse, you should see something similar to the following window:



This is the "EZclipse" perspective that we will be using in lectures and homework assignments.

### (2) EZclipse Overview

EZclipse is designed to only include the tools and windows you need to write Java programs, without the unnecessarily complicated features you'd encounter with a traditional Eclipse installation.

Once EZclipse is installed, you should see the following things:

- The **Package Explorer** (on the left) lists your current packages (think of them as folders for your Java programs).
- The **Console** (on the bottom) will show any output (from System.out.print/System.out.println) and allow you to enter any program input. The **Debug** tab will occasionally show up (in place of the console) when you are debugging, but you can ignore it.
- The Editor (with a gray background if no files are currently open) is for the editor where you will write your programs.
- Viz which is a program visualizer for debugging your programs.

EZclipse will auto-download your assignments for CSE 143; so, every time you restart Eclipse, you should see the most up-to-date files without having to download anything from the course website!

#### (3) Starting your first Java program on EZclipse

After installing EZclipse, you should see a "practice" project folder in the **Package Explorer** window. This folder is provided for you to make and test new Java programs unrelated to your homework assignments.

(a) To create a new Java file, click on the dropdown arrow next to the "new file" icon at the top left corner of the Eclipse toolbar, and then select Class:



In the resulting window, give your class a name using Java's camel-casing naming conventions, such as in the following example:

	practice/sic	Browse
Package:	practice	Browse
Enclosing type:		Browse
Name:	HelloWorld	
Modifiers:	<ul> <li>public  package  private  protected</li> <li>abstract  final  static</li> </ul>	
Superclass:	java.lang.Object	Browse
Interfaces:		Add
		Remove
Which method stub	s 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	)

Note: If you get a warning, "The use of the default package is discouraged", you can ignore it (we're not discussing Eclipse packages in this course). Also, when providing a name for your Java class, remember to omit the .java extension.

(b) Click Finish and you should see the new file in your editor:

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l Package Explorer 없		•		] HelloWorld.java ⊠		1	● Visualizer ⊠		- 0
	8	69 0	~	1 package practice; 2			Animation (ms): 🕕 300	Zoom (%): 🕕 100%	
• @} > practice [cse143-hw "@> src "∰> practice • ि Helloworld.java • ▲ JRE System Library [	master] JavaSE-1.	8]		3 public class HelloWorld { 5 } 6					
□ Console <sup>™</sup>					🛃 🖸 👻 📑 🗮 🗖	3			
No consoles to display at t	this time.								

From here, you're ready to start programming with Eclipse!