Computer Science

Introduction

Integrated Development Environment (IDE): Eclipse – Hello World

Lecture Contents

• Previously, on Installing Eclipse...

Previously, on Installing Eclipse...

- When you start Eclipse...
 - the default directory should be fine.
 - this is where your code will be saved!



Previously, on Installing Eclipse...

- If you get here, then it seems you have Eclipse installed successfully.
 Congratulations!
- Next step is writing your first Java program!



Hint: If you ever lose your
 "Package Explorer" or other tabs,
 "Reset Perspective..." might restore the interface to the default settings...





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Select an appropriate name; no spaces

Later, I suggest you create a new project for each unit, and separate assignments within each unit into new packages.

Uncheck this box

Eclipse		
	• • New Jay	va Project
ckage Explore	Create a Java Project Create a Java project in the workspace or in an external location.	
e are no proje Id a proiect:	Project name: HelloWorld	
<u>Create a Jav</u> <u>Create a pro</u> Import proje	Use default location Location: //Users/christophernielsen/eclipse-workspace2024/HelloWor JRE	
	 Use an execution environment JRE: Use a project specific JRE: 	JavaSE-17 •
	Use default JRE 'JRE [17.0.4]' and workspace compiler preference	s <u>Configure JREs</u>
	Project layout Use project folder as root for sources and class files Create separate folders for sources and class files 	<u>Configure default</u>
	Working sets	
	Add project to working sets Working sets:	New ≎ Select
	Module Create module-info.java file	
	0	< Back Next > Cancel Finish



The standard naming convention for Java packages is the internet domain name in reverse.

For example, our school domain name is "bjfles.com", so Java packages from our school should start with: com.bjfles

After this, add some descriptive naming.





The naming convention for a Java class is *Pascal Case*, also known as *upper camel case*.

Selecting this will add template code for the **main** method, which is where the Java program will start running.

	•••	New Java Class		
ckage Explorer X	Java Class Create a new Java	ı class.		C
HelloWorld JRE System Library [JavaSE-17 Src Com.bjfles.chris.helloworld	Source folder: Package: Enclosing type:	HelloWorld/src com.bjfles.chris.helloworld		Browse Browse Browse
	Name: Modifiers:	HelloWorld • public package private p	orotected final	
	Superclass: Interfaces:	java.lang.Object		Browse Add Remove
	Which method stub:	s would you like to create? v public static void main(String[] args) Constructors from superclass v Inherited abstract methods		
	Do you want to add	comments? (Configure templates and default val	ue <u>here</u>)	
	•		Cancel	Finish

Eclipse







What about VS Code?

If you downloaded VS Code: code.visualstudio.com





What about VS Code? You will need to either install the JDK

or an extension such as this one:

•••		\leftarrow \rightarrow \bigcirc HelloWorld				
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ρ	@category:debugger ≣ ♡		J. Jay	v22.1.2		
j.	Java ♀ 1M ★ 5 Java Platform Extension ♦ Oracle Corpo Install		n │			
å	Extension Pack for Java Popular extensions for J		ava [™] Insta	💵 🗸 Auto Update ဆို		
₿	هٍ Microsoft ش	DET	AILS FEATURES CHAN	GELOG		
L <u>®</u>	A lightweight Java debu	Ja	/a Platform Ex	tension for	Categories	
	 Java Lang	Visual Studio Code		Programming Languages		
	George Fraser Install				Snippets Linters	
	💼 [deprecat 🗘 1.1M 🛨 3.5	Java Platform extension from Oracle brings full featured development support (edit-compile-debug & Debuggers)				
8	[deprecated] Debugger Don Jayamanne Install	[deprecated] Debugger Don Jayamanne Install test c		ycle) to VS Code. It offers support for Maven and		

Gradle

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What about VS Code?

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	ζŊ	RUN AND DEBUG		🗙 Welcome	📕 HelloWorld.java	×		□ …
	ے م	✓ RUN ✓ RUN and Debug		HelloWorld.jav 1 public o Run r	va > 😤 HelloWorld > (class HelloWorld { main Debug main	⑦ main(String[] args)		
	ۍ م	To customize Run and D create a launch.json file	ebug	2 pub 3 4 }	lic static void mai System.out.println	n(String[] args) { n("Hello World!");		
	æ	Show all automatic debu configurations.	β	5 }	(\checkmark	~ X
			Filter (e.g. text, !	exclude, \escape)				
	8			Listening on 56345 User program running Hello World!				
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	£633	Uncaught Exception	S					

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