

Setup for MPP October 2021

This document covers the follow points:


1. Software setup
2. Configuring Eclipse.
3. Load some Java projects to your workspace

Software Setup. For convenience in assessing your work, we ask you to use the versions of Java and Eclipse that we specify here. You will download and install these as part of your software setup.

Java. You will need to download and install Oracle jdk-16 which can be obtained by following this link:

<https://www.oracle.com/java/technologies/javase-jdk16-downloads.html>

Use the Installer:

Windows x64 Installer	150.58 MB	 jdk-16.0.2_windows-x64_bin.exe
-----------------------	-----------	--

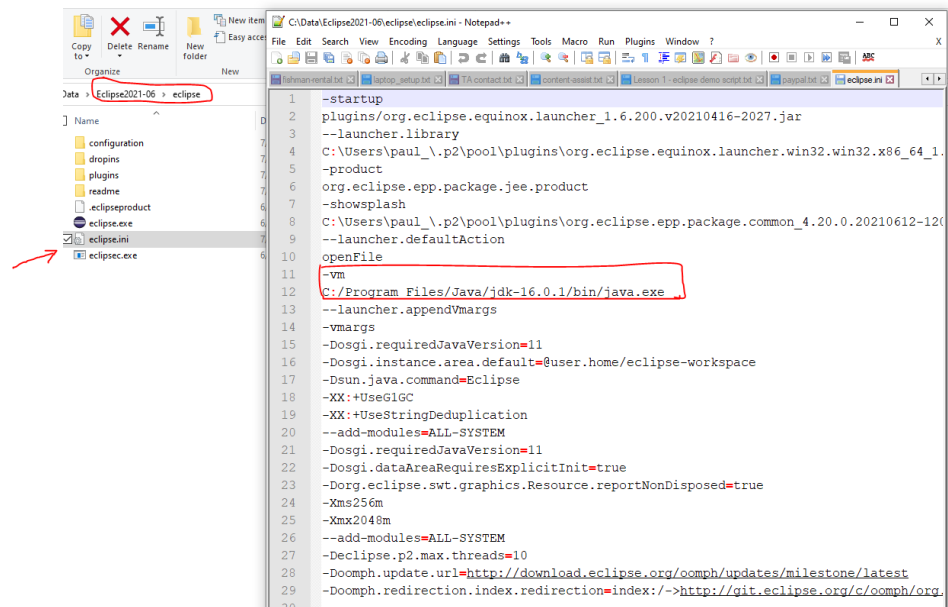
Eclipse. Download Eclipse 2021-06; make use of the Installer. Go here:

<https://www.eclipse.org/downloads/>

Troubleshooting. When you attempt to run Eclipse, you may get an error message "Incompatible JVM". This can be solved by opening the text file eclipse.ini (in the folder where eclipse.exe is installed) and adding two lines:

-vm

C:\Program Files\Java\jdk-16.0.1\bin\java.exe



For more details about this, look at https://wiki.eclipse.org/Eclipse.ini#Specifying_the_JVM

Also: The character encoding in Eclipse needs to be changed to UTF-8:

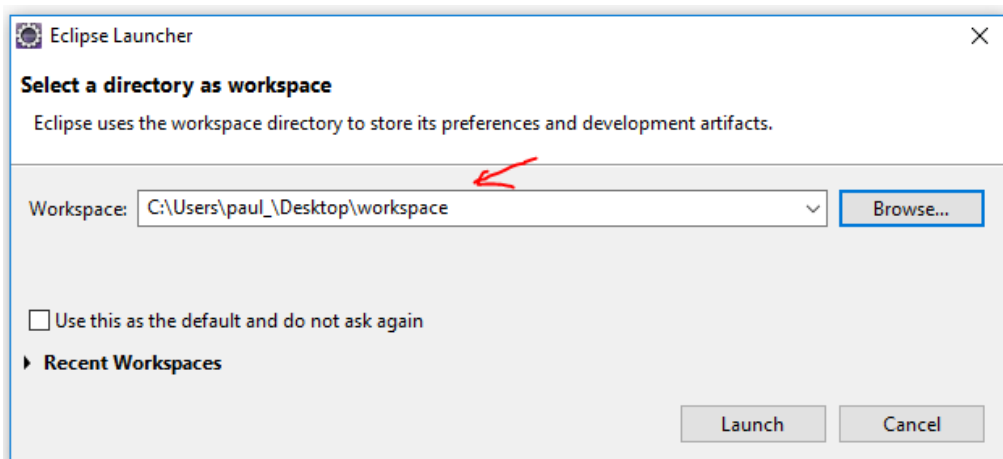
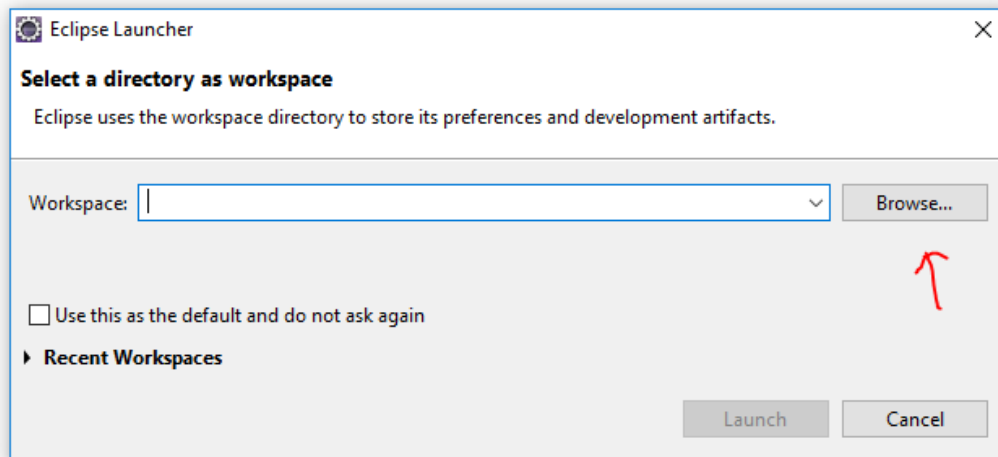
In Eclipse, go to Windows > Preferences > General > Workspace

At the bottom left in this screen, you can change Text File Encoding to Other (and select UTF-8).

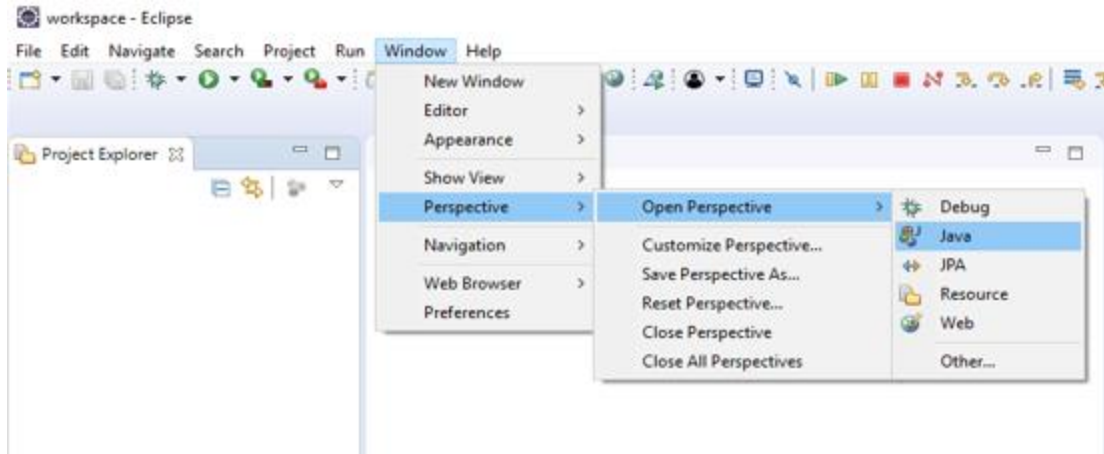
StarUML. Download the UML design tool StarUML, available at staruml.io. Use a trial version.

Configuring Eclipse.

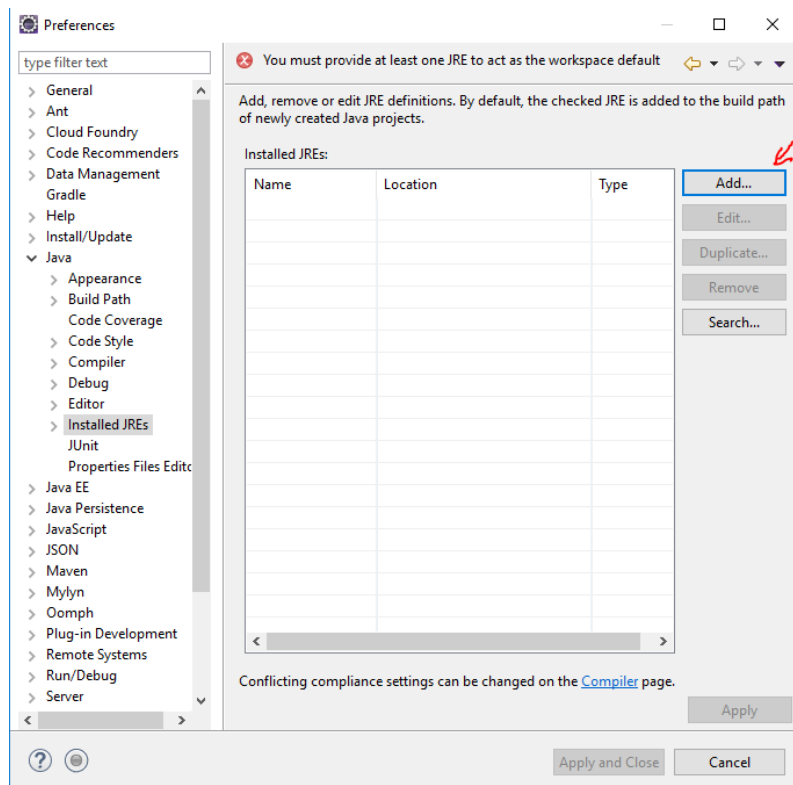
1. Create a workspace that you will use for MPP. You can do this by creating a new folder called workspace. All the code that you write and use in the course will be in this folder.
2. Launch Eclipse; at startup, it will ask for your workspace location. Browse to the workspace folder that you just created and click the "Launch" button.

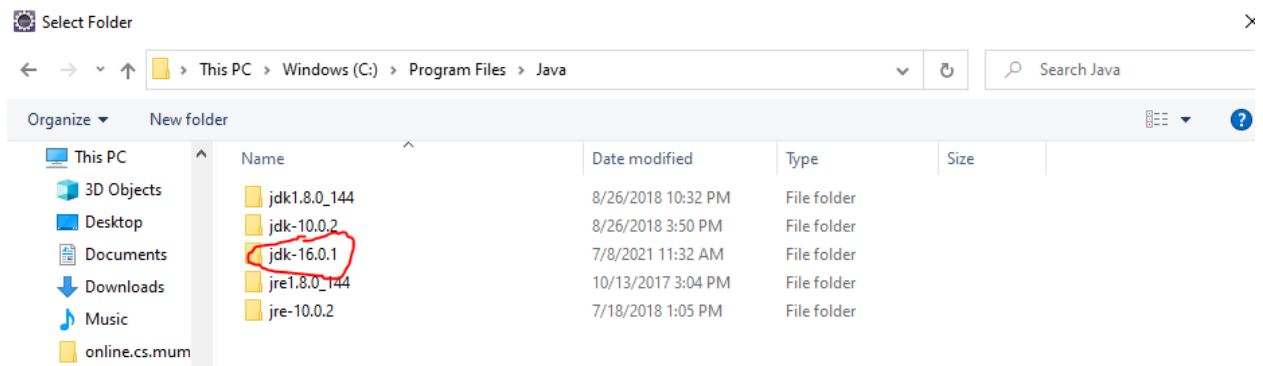
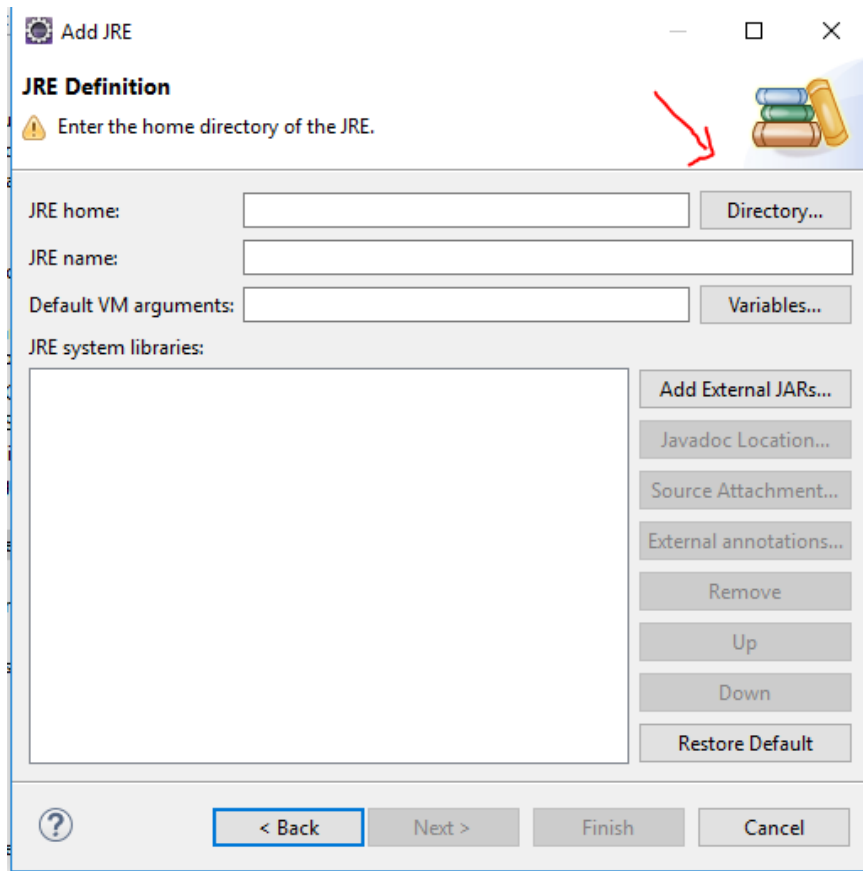


3. Close the Welcome tab and find Window along the top menu bar. Click Window > Perspective > Open Perspective > Java.



4. Point Eclipse to the jdk-16 distribution by doing the following.
 - a. Go to Window > Preferences > Java > Installed JREs
 - b. If jdk-16 already appears in this window, be sure the box next to this java version is checked. Otherwise, if the jdk-16 version has not been installed, then click Add and navigate to this jdk distribution in your file system. Select Standard VM and click Next. Click the Directory button beside the JRE home field, and then navigate to your jdk distribution.

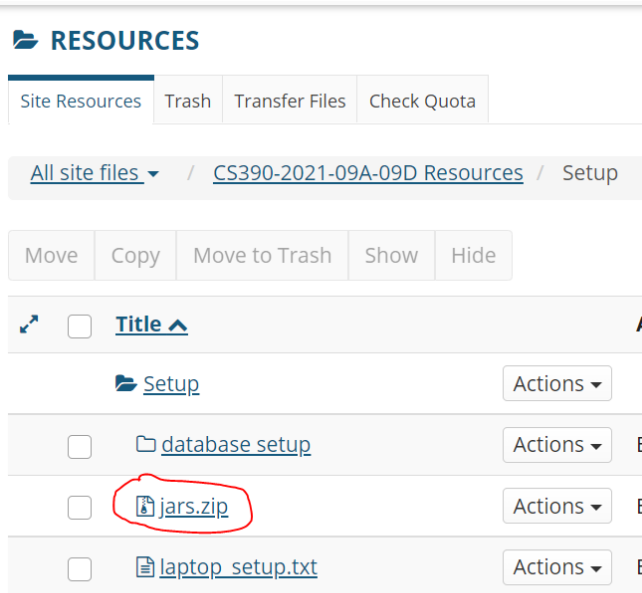




- c. When you have highlighted the folder jdk-16.0.1, click OK and you will see the following window:

Load External jars into your workspace

1. There is a zip file jars.zip in Resources > Seup. Download this zip file, unzip, and place the jar files folder directly into your workspace.



2. You will add these jars to your projects after you have loaded them into Eclipse

Load Java Projects

3. You will need to import two Java projects into your workspace before class begins. To make sure all the code in these projects compiles in your workspace, you will first need to download and install the jar files that will be used in the course.
4. *Jar Files*. These are in a zip file jars.zip in Resources > Seup. Download this zip file, unzip, and place the jars folder directly in your workspace.

[All site files](#) / [CS401-2021-10A-10D Resources](#) / setup

Move Copy Move to Trash Show Hide

☐ [Title](#) ^

[setup](#) Actions ▾

☐ [jars.zip](#) Actions ▾

☐ [LaptopSetup.pdf](#) Actions ▾

▼ workspace

[jars](#)

[junit-4.8.1.jar](#) 10/19/2014 6:57 PM

[logsetup.jar](#) 7/5/2015 4:11 PM

5. *Projects to download.* You will need the InClassExercises and LectureCode folders:

[All site files](#) / [CS401-2021-10A-10D Resources](#)

Move Copy Move to Trash Show Hide

☐ [Title](#) ^

[CS401-2021-10A-10D Resources](#)

☐ [In Class Exercises](#)

☐ [In Class Exercises - Solutions](#)

☐ [Lecture Code](#)

☐ [Lecture Slides](#)

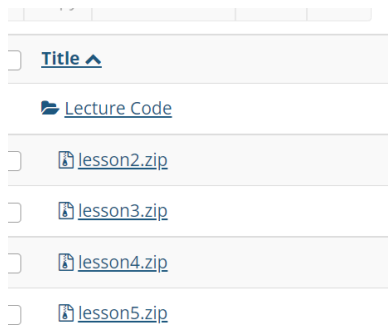
☐ [Lecture Slides - Updates](#)

☐ [Reading Materials](#)

☐ [setup](#)




☐ [Syllabus](#)

The Lecture Code folder contains individual zip files, one for each lesson (like lesson2.zip, lesson3.zip, etc). Create an empty LectureCode project in your workspace and then after unzipping the individual lesson zip files, copy each one as a package in your LectureCode project.

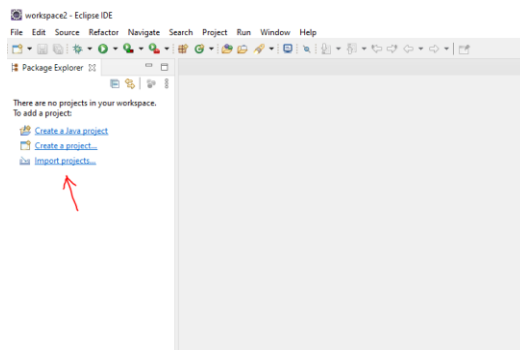


The InClassExercises folder a zip file InClassExercises.zip and another JavaLibrary.zip. Unzip both of these directly into your workspace import them into your workspace in the following way.

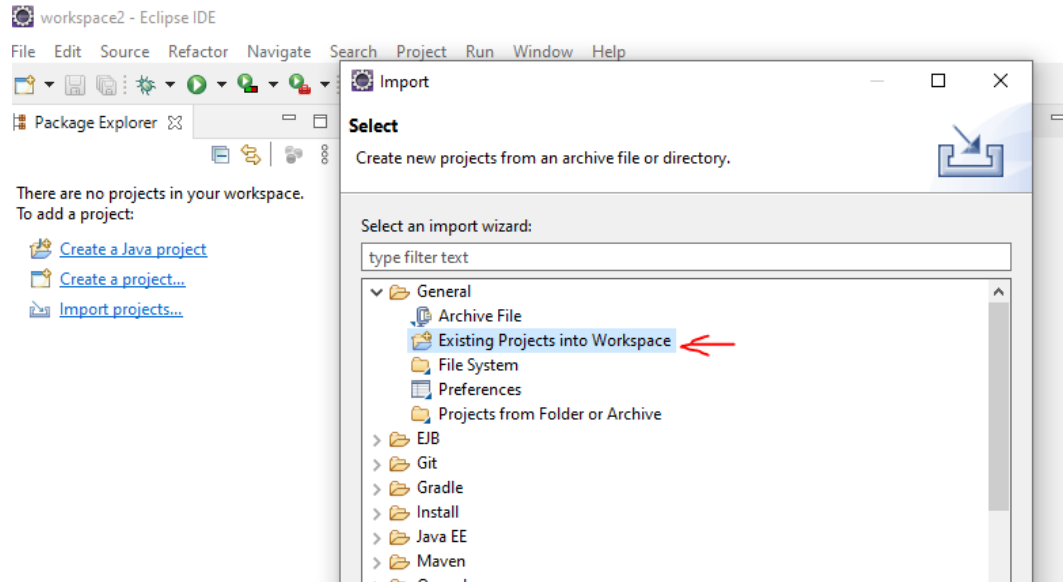
A. We show how to import InClassExercises and JavaLibrary. JavaLibrary.

	.metadata	9/25/2021 9:12 PM	File folder
	InClassExercises	9/25/2021 9:11 PM	File folder
	jars	9/25/2021 8:43 PM	File folder
	JavaLibrary	9/25/2021 9:23 PM	File folder
	LectureCode	9/25/2021 9:14 PM	File folder

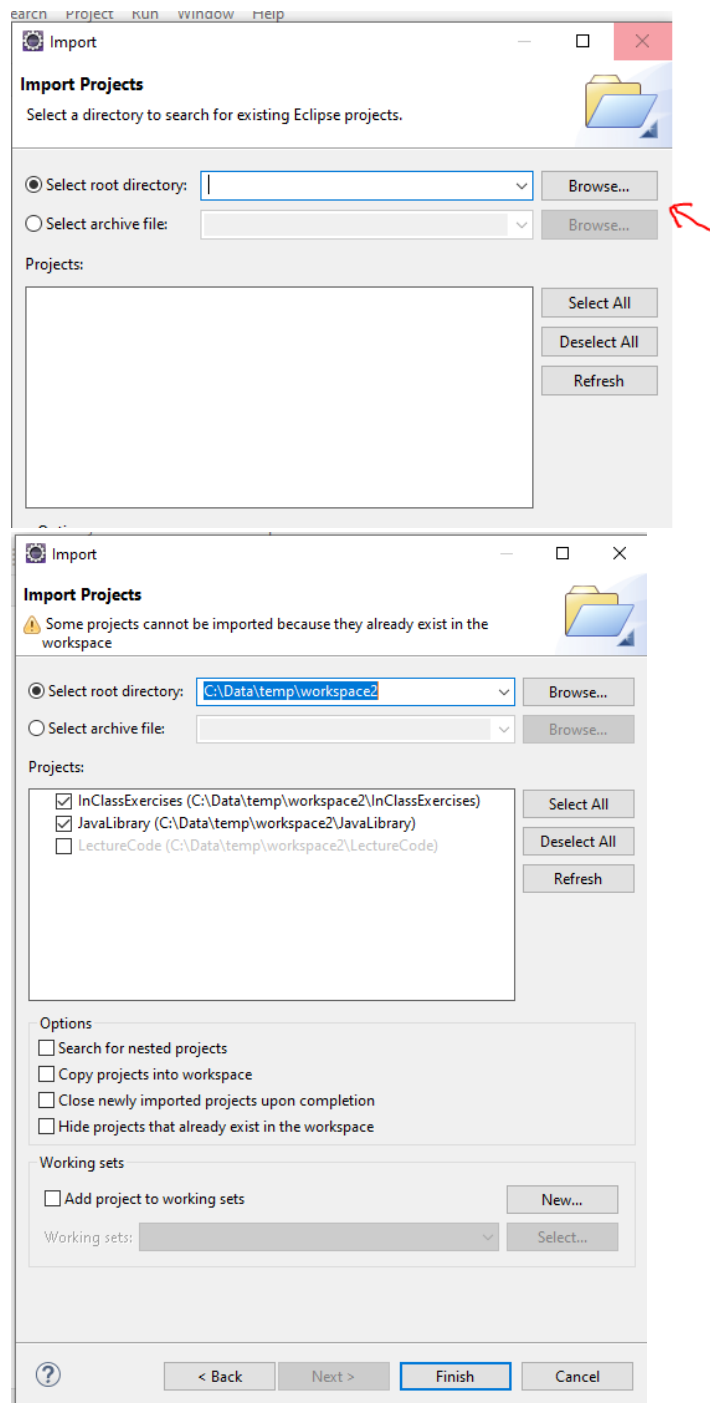
Either click the "import" option displayed on the left panel or else right click the left panel and select "Import".



B. Select General > Existing Projects into Workspace



C. Click Browse, navigate to your workspace



Click Finish.

Add External Jars to the projects

You will follow the same procedure for each project. Right click on the project and go to Properties (at the bottom) > Java Build Path > click Libraries > click add external jars. Then navigate to the jars folder that you place in your workspace and add all those jar files.