# Using the IntelliJ IDE

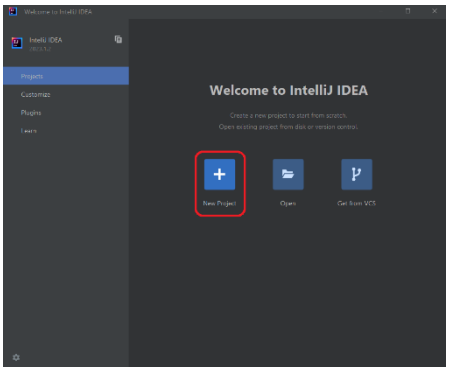
This document explains how to use the JetBrains IntelliJ IDE to compile lab 13. Steps 4 and onward can be used to start projects for other labs … just change the lab number.

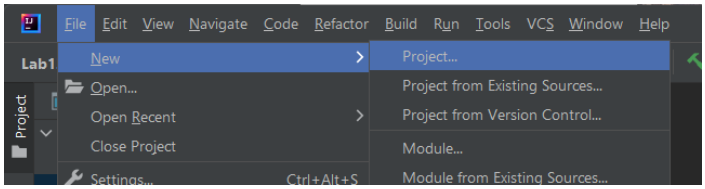
**(1)** Download and install the latest 64-bit version of the JAVA SE Development Kit from Oracle: https://www.oracle.com/ca-en/java/technologies/downloads/. If you are using a Mac or M1 Mac, download the **x64** version … NOT the Arm version.

**(2)** Download the **Community Edition** of the IntelliJ IDE (https://www.jetbrains.com/idea/download/#section=windows) for windows or (https://www.jetbrains.com/idea/download/#section=mac) for Mac OS.

**(3)** Install it and run it.

**(4)** The first time that you run, you should select **New Project** from the Welcome screen. Later, when you start IntelliJ, it may come up with a previous project already opened. In that case, select **New** from the **File** menu and choose **Project**.



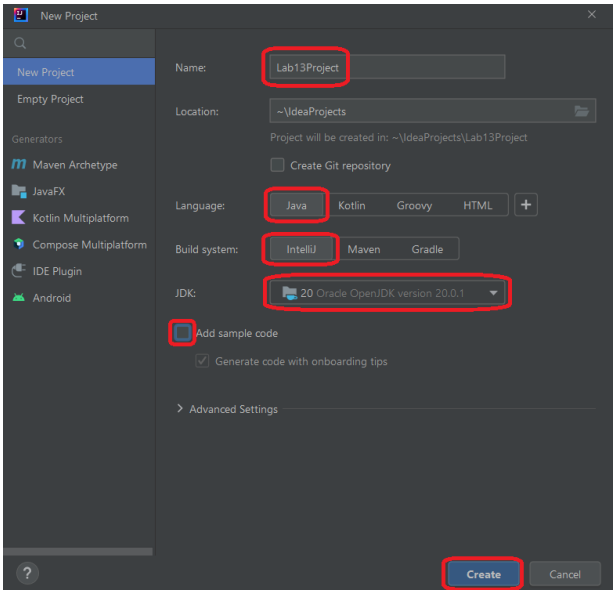

**(5)** In the dialog box that appears, type in a **Name:** for the project (e.g., **Lab13Project** … or whatever lab number you are working on).

Make sure that the **Language** is set to **Java** and that the **Build system** is set to **IntelliJ**.

Ensure that the **JDK** has been set to the version that you downloaded in step 1 (e.g., **20 Oracle OpenJDK version 20** … or something similar). For the work that we are doing, it may not matter which version of Java you are using. Just make sure that it is a JDK version and not a JRE version (which doesn't allow compiling).

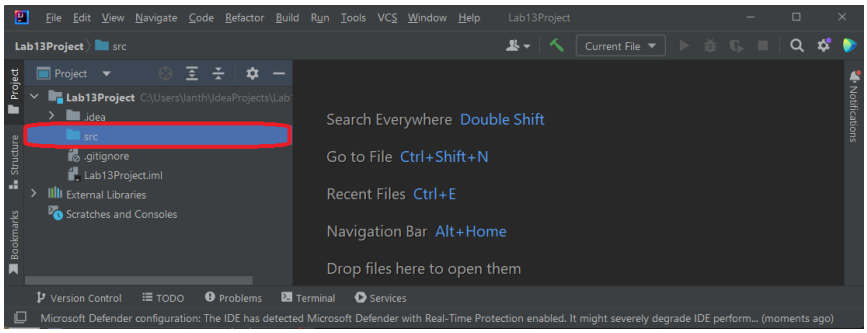
**Unselect** the **Add sample code** checkbox.

Click the **Create** button.

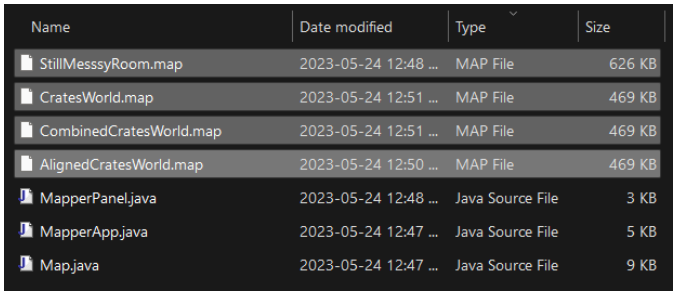



**(6)** You should see a **Project** open that looks something like this →

Select the blue **src** folder on the left side of the window.

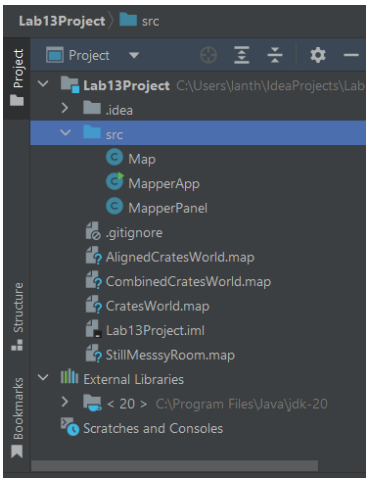


**(7)** Unzip the folder that you downloaded for your lab. Make sure that this file explorer window does not overlap your IntelliJ window.




Select the **.map** files (or the **.vmp** files for later labs) but do not select any **.class** nor **.java** files.

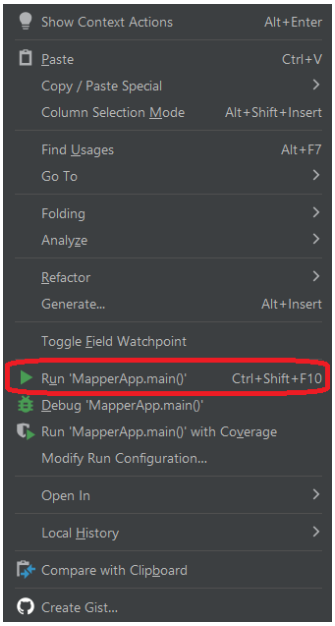
Drag the selected files directly onto the **Lab 13Project** folder on the top left side of the IntelliJ window. You should see a window that asks you to move the files over. Press the **Refactor** button.




You should see all of the **.map** files appearing under the **Lab13** folder now. Now, select the blue **src** folder on the left side of the window (if it is not already selected). Select all of the **.java** files that you unzipped (but do not select any **.class** files) and drag them onto the blue **src** folder on the left side of the window. Here is an image of how things will look →

**(8)** Double-click on each of the **java** source code files (i.e., ) to open them in the editor. In the editor, select the tab that corresponds to the main program. In this case it is the **MapperApp** program. In general, it will be the class file that has the extra green play button at the top right of the icon like this:

**(9)** Once the tab is opened with the main program in it (e.g., the **MapperApp** tab), right click in the editor to open the context menu and then select the **Run** option as shown here →




If all is working, after a few seconds, you should see the **MapperApp** window appear … indicating that the code is running. After you do this once, you should then be able to run the program at any time by pressing the play button on the toolbar menu:

**(10)** When you are ready to hand your code in, you will just be handing in your **.java** source files and your generated snapshots. To find the java source files, go to your main application code in the editor. Right click to get the context menu. Select **Open in** and then **Explorer**. (although this will likely differ for Mac and Linux). You will be in a folder where all your files are located. You can submit the **.java** files from this folder location.