

SpinWorksJ can be compiled for Windows, MacOS OSX, and Linux using the freely available Eclipse package. Two sets of source code are provided, one for Windows and another for MacOS. They are essentially identical except that the MacOS version has a bit of extra code to handle the MacOS System menu (About..., Preferences, etc.), which Windows doesn't have.

There is no source for Linux, but the Windows version should compile in Linux with few, if any, changes. Just make sure that you link to the correct Linux libraries, which can be downloaded from the Eclipse site.

Note that this is a very large project – some 60,000 lines of code in over 100 files. It is expected that you have some programming experience and some experience with the Eclipse IDE. The most difficult thing will likely be getting all the libraries properly installed and linked.

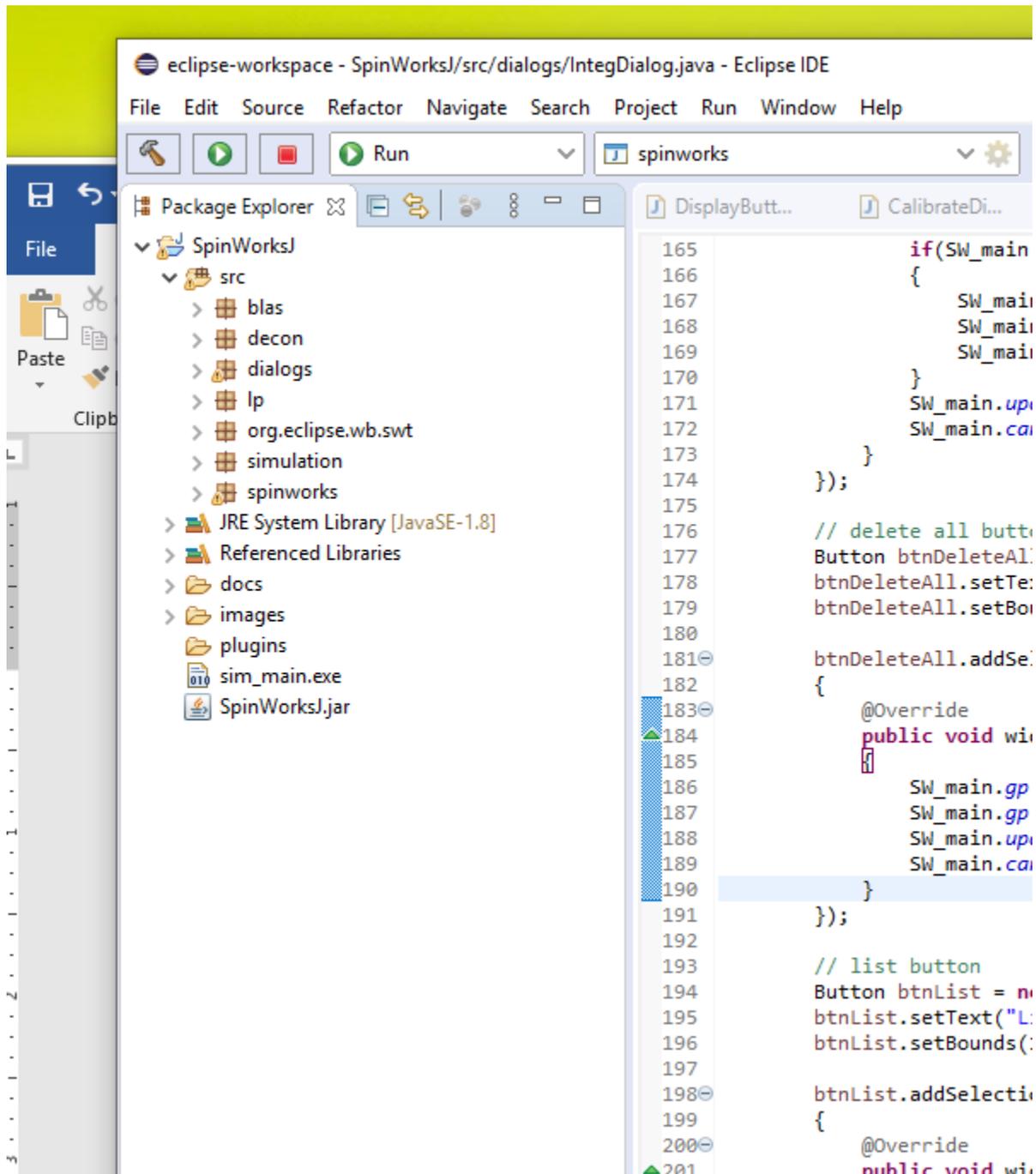
Steps for loading the SpinWorksJ source into the Eclipse IDE:

1. Download Java for your computer. You will need both the Java Runtime Environment (JRE) and the Java Development Kit (JDK).
2. Download and install the eclipse IDE for Java Developers. This can be found at: <https://www.eclipse.org/downloads/packages/> Download the appropriate version for your OS. You don't need the "enterprise" version.
3. In the eclipse download location, find the eclipse executable. On Windows this will be something like:

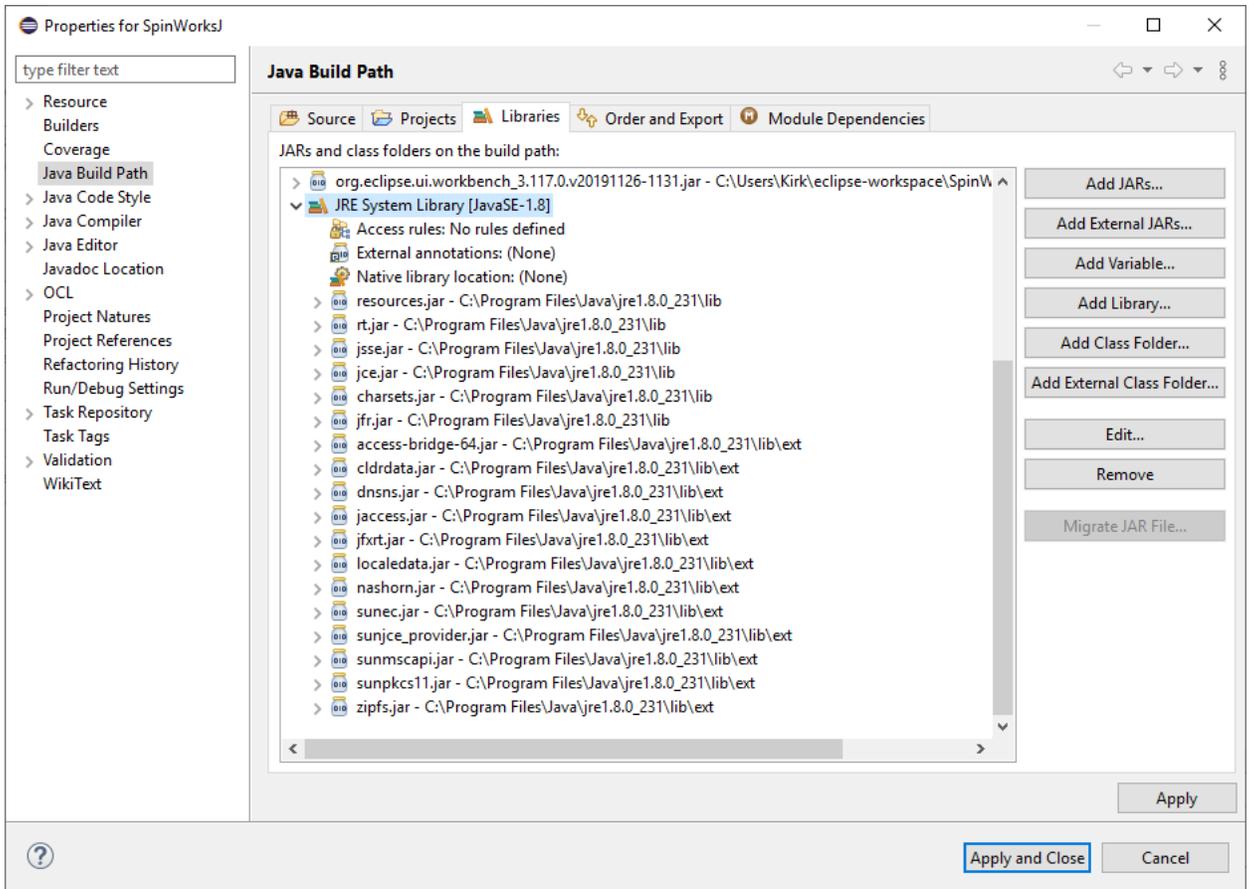
C:\Users\Kirk\Downloads\eclipse-java-2019-12-R-win32-x86_64\eclipse\eclipse.exe

Make a shortcut to your desktop, **Start** menu or whatever if you want.
4. Start Eclipse.
5. In the **Help** menu select **Install New Software**. In the dropdown of the dialog, select a download site corresponding to your version. (for example: <http://download.eclipse.org/releases/2019-12>). Open **General Purposes Tools** in the available software list and then select all of the **Swing**, **SWT** and **WindowBuilder** components. Select **Next** and then **Finish** to download the software.
6. The previous step should have installed a large number of plugins (.jar files) into the plugin folder of the Eclipse distribution. SpinWorks will only need a few of these, but some of the Eclipse Windowbuilder tools may also require a few. The essential library .jar files are also included with the SpinWorks distribution, and should work, but Eclipse may have newer versions.
7. From the Eclipse File menu select Import... and then open the General category in the list of options and then select **Existing Projects into Workspace**. Browse to the folder where you downloaded SpinWorks and select the SpinWorksJ folder.

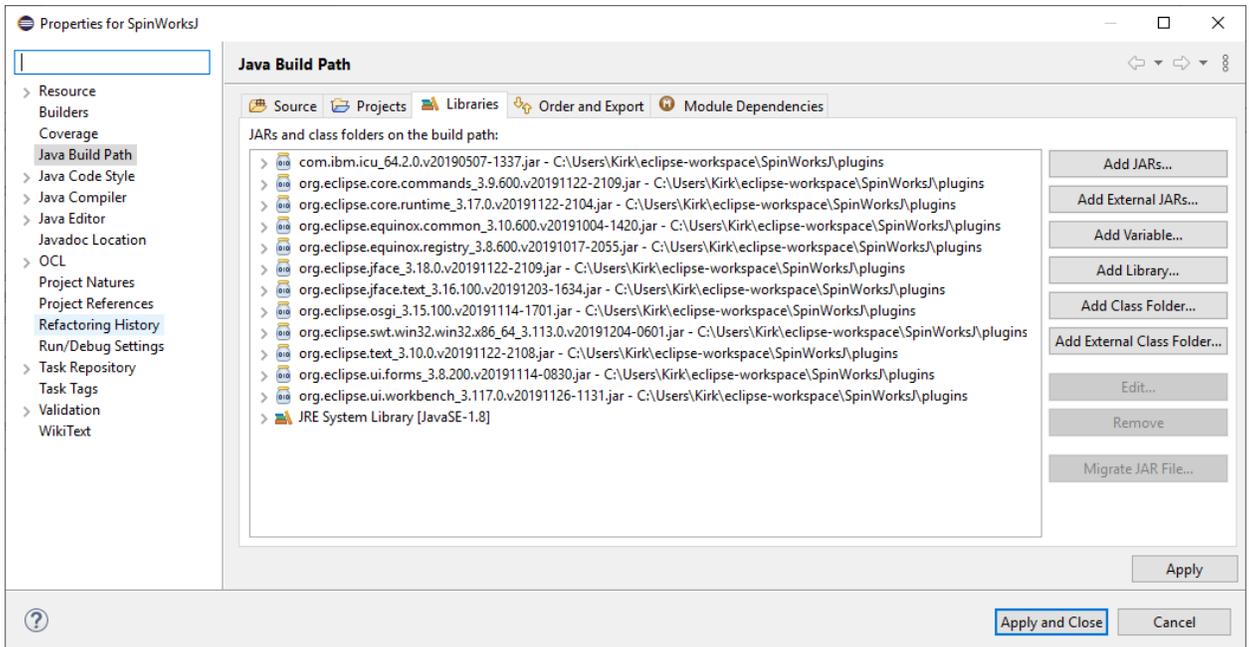
- SpinWorks should now be loaded into the workspace. The left pane of Eclipse (The Package Explorer) should look something like this:



- It is then necessary to link in the correct libraries. This is most easily done by right clicking on the **JRE** and **Referenced Libraries** selections in the package explorer. Select **Build Path** and then **Configure Build Path**. For the JRE Libraries, you should have the following:



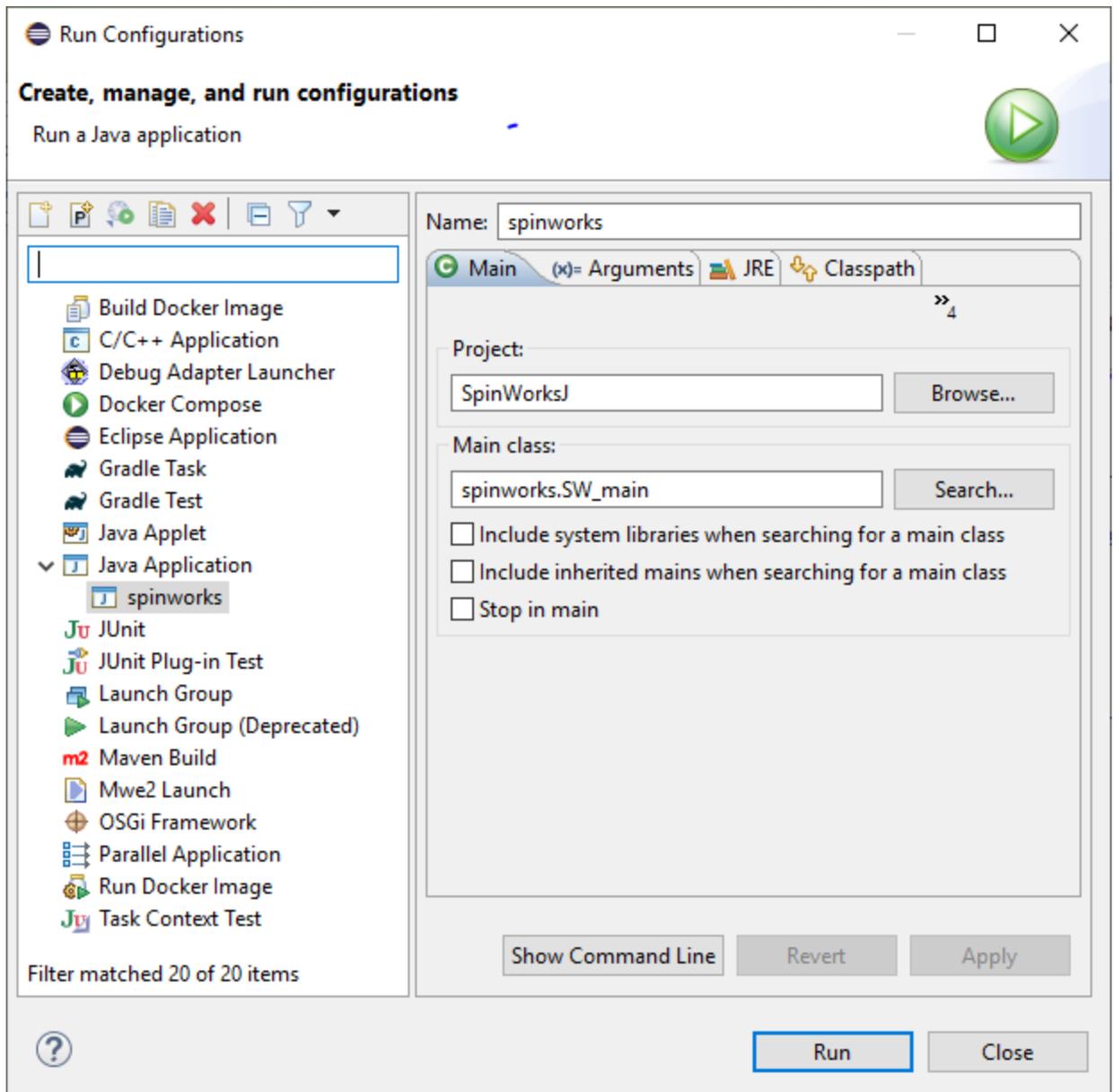
Use the **Add Library...** button to add the correct JRE library on your system. For the **Reference Libraries** you should have:



Use the **Add External Jars...** button to add these libraries from either the plugins folder in the SpinWorksJ distribution or the plugin folder in the Eclipse distribution. Of course, the locations of these files on your machine will be different than on mine. Also note that the versions numbers (e.g. `_3.8.200.v20191114-0830`) of the libraries may be different. All of the libraries are tagged with a version number and the date and time that they were created. On MacOS, the SWT library will be named `org.eclipse.swt.cocoa.macosx.x86_64_...` .

All of these library paths are stored in the `.classpath` file, which you can edit manually if you are desperate.

10. You will then need to specify a run configuration. Select **Run** in the Eclipse menu bar and then **Run Configurations...** from the drop-down. You should then see a run configuration dialog:



Select the **SpinWorksJ** project, **Java Application -> spinworks**, And then select **spinworks.SW_main** as the Main Class or entry point for the application.

11. Try running SpinWorksJ using the  button on the Eclipse toolbar. If everything has gone well, SpinWorksJ should build and run.