Eclipse - Creating a JAR file

In Eclipse you can create JAR files using the File/Export menu item.



Clicking on Export brings up the following dialog:

| | Export | - 🗆 🗙 |
|---|-----------------------------|---------------|
| Select Export resources into a JAR fil | e on the local file system. | |
| Select an export destination: | | |
| type filter text | | |
| Install Java Java Jarafile Javadoc Runnable JAR file Java EE Java EE Plug-in Developmer Remote Systems Run/Debug Tasks Tasks Team Web Web Web Services XML | e t | ^ |
| ? | ick <u>N</u> ext > | Einish Cancel |

Choose JAR File as the designation type, the line which says "type filter text" could be used to narrow the search of destination types by typing JAR into it. On the other hand the folder Java can be opened and JAR File chosen.

Clicking Next brings us to the dialog:

| ۲ | JAR Export | – 🗆 🗙 | | |
|---|--|-----------------|--|--|
| JAR File Specification Define which resources should be exported into the JAR. | | | | |
| Select the resources to <u>e</u> xport: | | | | |
| ▶ ✔ 😂 Java SE Example | 1 ♥ k.classpath ♥ k.project | | | |
| Export generated class files and resources Export all output folders for checked projects Export Java source files and resources Export refactorings for checked projects. Select refactorings | | | | |
| Select the export destination | n: | | | |
| JAR file: C:\Eclipse Install | ations\workspace\TestJar.jar 🗸 🗸 | B <u>r</u> owse | | |
| Options: Compress the contents of the JAR file Add directory entries Overwrite existing files without warning | | | | |
| ? | < <u>B</u> ack <u>N</u> ext > <u>F</u> inish | Cancel | | |

In this dialog the following should be filled in:

- The destination chose a folder and a filename for the JAR. Make sure that the folder is one that you can find and easily switch to in a Command Prompt so that you can execute the file.
- You should export the Generated class files and resources.
- You can also export the source files
- At this point do not compress the contents
- You should export the classpath
- You do not need to export the project (but it is marked for export above)

Click on Next, rather than Finish, so that you can specify the main file in a later dialog. You will get the following dialog when you click Next.

| JAR Export | - 🗆 🗙 |
|---|-----------------|
| JAR Packaging Options Define the options for the JAR export. | |
| Select options for handling problems: Export class files with compile errors Export class files with compile warnings | |
| Create source folder structure | |
| ☑ B <u>u</u> ild projects if not built automatically | |
| Save the description of this JAR in the workspace | |
| Description file: | B <u>r</u> owse |
| | |
| | |
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| | |
| | |
| | |
| < Back Next > Finish | Cancel |

Files with error can be exported, in case the project is being moved to another computer. These boxes do not need to be checked in this case, but they have been left checked.

Clicking next gives the following dialog:

| JAR Export | – 🗆 🗙 |
|---|------------------|
| JAR Manifest Specification Customize the manifest file for the JAR file. | |
| | 1 |
| Specify the manifest: | |
| | |
| Save the manifest in the workspace | |
| Se the saved mannest in the generated SAR description me | |
| <u>M</u> anifest file: | Br <u>o</u> wse |
| ○ <u>U</u> se existing manifest from workspace | |
| Manifest file: | Bro <u>w</u> se |
| | |
| Seal contents: | |
| ○ Seal the JAR | Deta <u>i</u> ls |
| Seal some packages Nothing sealed | D <u>e</u> tails |
| Select the class of the application entry point: | |
| Main <u>c</u> lass: | Browse |
| | |
| | |
| | |
| (?) < Back Next > Finish | Cancel |
| | |

The manifest file should be generated so that the entry point class can be specified. The entry point class tells the java runtime executable where to find a class with the main method.

The Main Class must be specified by clicking the Browse button which will bring up the next dialog as shown on the next page.

| ۲ | Select Main Class – | |
|--|---------------------------------|--------|
| Select the class which is the application's entry point: | | |
| | | |
| G⊳MainTest | Class | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| (default p | ackage) - Java SE Example 1/src | |
| | | |
| | | |
| | | |
| ? | ОК | Cancel |
| | | |

Select the class that has the main method and click OK this will give back the prior dialog. Note that the name of the Main class will now be filled in as shown below.

| JAR Export | - 🗆 🗙 |
|---|------------------|
| JAR Manifest Specification Customize the manifest file for the JAR file. | |
| Specify the manifest: | |
| <u> <u> Generate</u> the manifest file </u> | |
| Save the manifest in the workspace | |
| Use the saved manifest in the generated JAR description file | |
| Manifest file: | Br <u>o</u> wse |
| ○ <u>U</u> se existing manifest from workspace | |
| Manifest file: | Bro <u>w</u> se |
| Seal contents: O Seal the JAR | Deta <u>i</u> ls |
| Seal some <u>packages</u> Nothing sealed | D <u>e</u> tails |
| Select the class of the application entry point: Main class: MainTestClass | Browse |
| | |
| | |
| < Back Next > Einish | Cancel |

Now click Finish and the JAR file will be created in the folder specified in a prior dialog of the wizard.