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Submission Instructions

Computer Science 2334
Fall 2013

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To submit an assignment, you should:

1. Generate the appropriate Javadoc documentation as described in Section A of the **Detailed Instructions** below.
2. Archive the project using the instructions given in Section B of the **Detailed Instructions** below.
3. Upload the project archive to http://learn.ou.edu using the correct drop box.

Please follow these instructions carefully. These instructions were developed with faculty, teaching assistants, and students in mind. If you have any questions after you read this document in its entirety, please contact your instructor or one of your TAs immediately. Also, for many assignments (most labs and projects 2 – 4), students should work together in groups and submit a single deliverable for each group, as detailed in the *Documentation Requirements* file.

Detailed Instructions:

If you are submitting the final project make sure to include "Milestones.txt" inside the Eclipse project – don't submit it separately. The Milestones.txt file will be included only on the final project submission; not labs or project designs. The Milestones.txt file will list the numbered objectives of the project and describe the objectives you believe that you have met. If you know of problems in meeting an objective, explain the problem, so that you may be considered for partial credit. A sample is given below.

> Milestone #1:
> > We met this milestone. The test data which demonstrates this is in milestone1.txt
> Milestone #2:
> > We did not meet this milestone.
> Milestone #3:
> > We sort of met this milestone. Our test data (included in obj3.txt) runs OK until the remove command is done. At this point the program gives a NullPointerException.

Directing the grader's attention to a part of the project that you struggled with and detailing what you attempted to do (along with what you accomplished) will allow the grader to be more fair in assigning a grade. If you fail to do so, then the grader may conclude that you had no idea what was going on and therefore you will not receive as much partial credit.

Section A – Creating Javadoc:

Before proceeding, read about how to generate the correct Javadoc documentation in *Documentation Requirements*. This file can be found on the class website, just as this one is. Java generates nicely formatted html documentation for its classes, just like what you see when you browse the Java API online at http://docs.oracle.com/javase/7/docs/api/. The trick is that you need to format your comments correctly in order to do so. The *Documentation Requirements* give those instructions in detail. This document will only show how to generate the documentation after you have properly written your source code and comments.
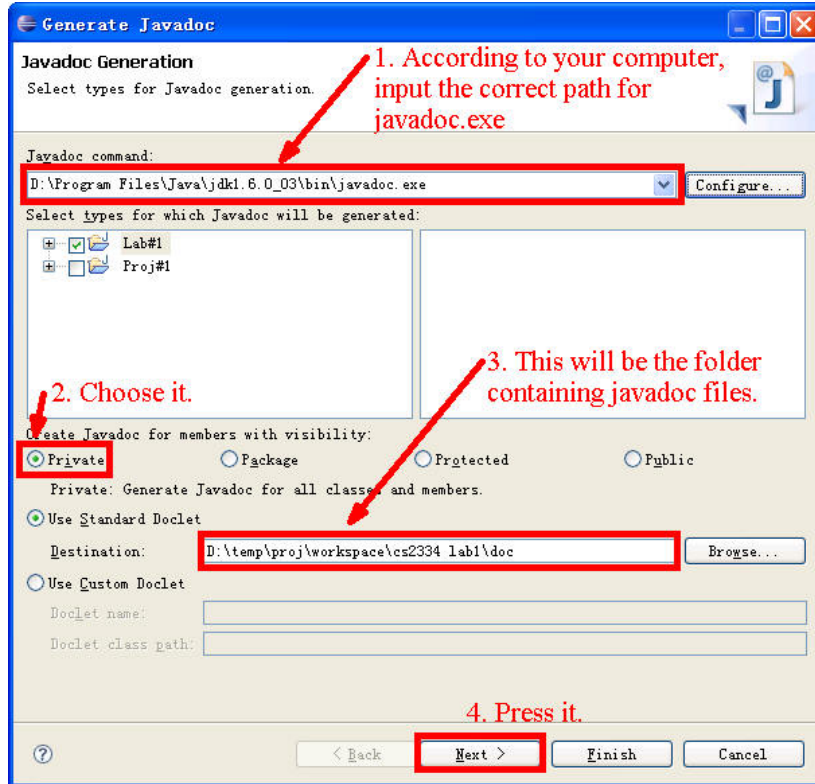
Javadoc Step 1 – Select the project for which to generate the Javadoc

Click on the project name for which you want to create javadoc.
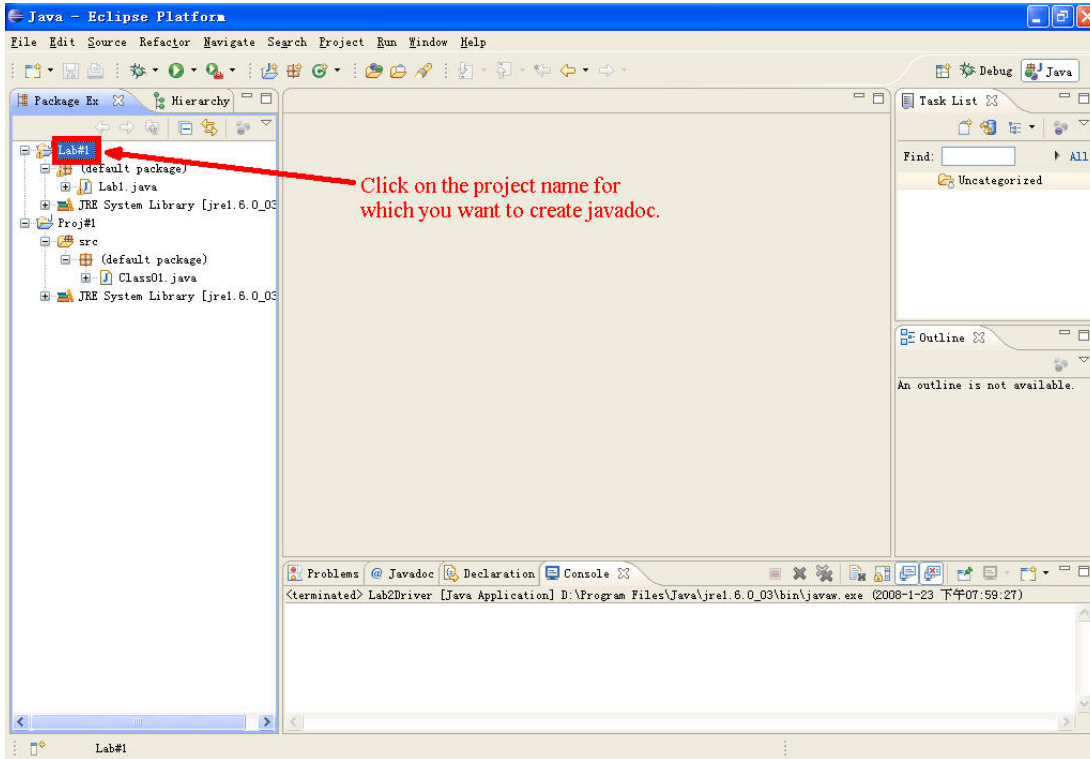
Javadoc Step 2 – Run the command to generate the Javadoc

Choose it.
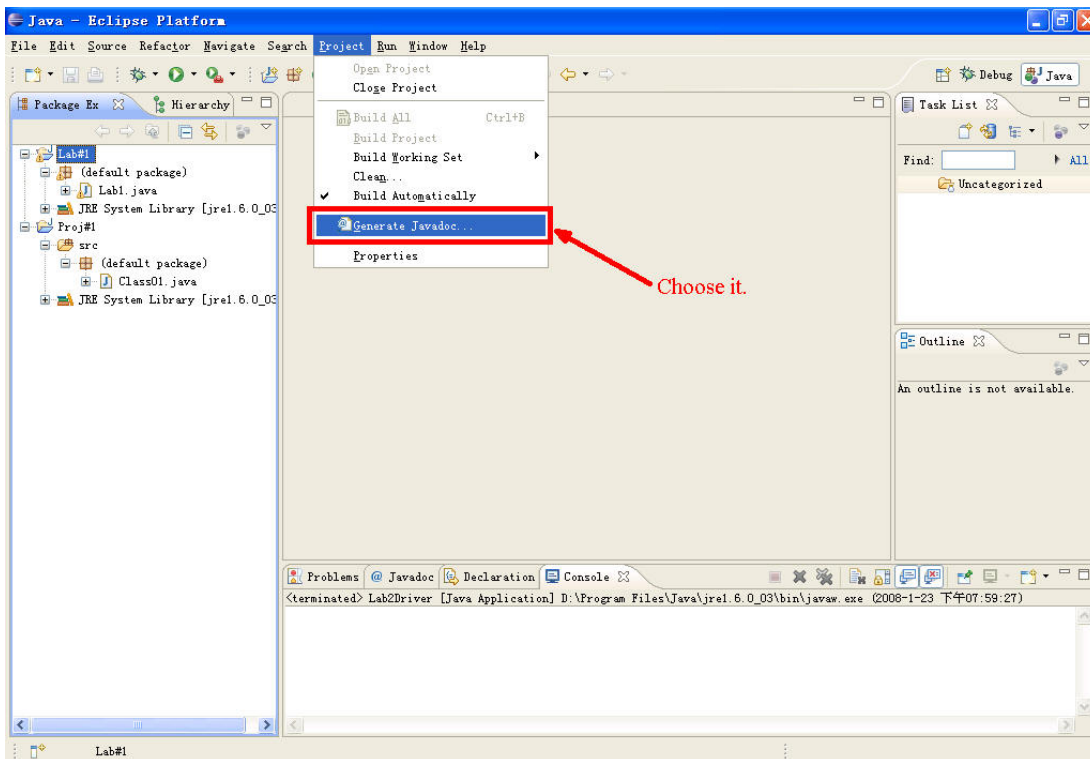
## Javadoc Step 3 – Set the correct options

This window does a few things. First, it makes sure that the javadoc command that Eclipse is expecting to use is the correct one. The command should be in the same directory as were the previously used commands java and javac, with respect to the JDK that you already installed. (Note that your path should list JDK 7 rather than 6.)

Ensure that you choose to create Javadoc for members with visibility of private. This is not the default, and if you follow good data encapsulation practices (and make most of your class variables private), they will not show up unless you select the "Private" option, as done above. Don't worry, all of your members with public, protected, and package visibility will also be included.

Note the destination location of your Javadoc (#3), as it should default to a "doc" directory inside your project; then select next.

Javadoc Step 4 – More configuration; keep the defaults, except for @author
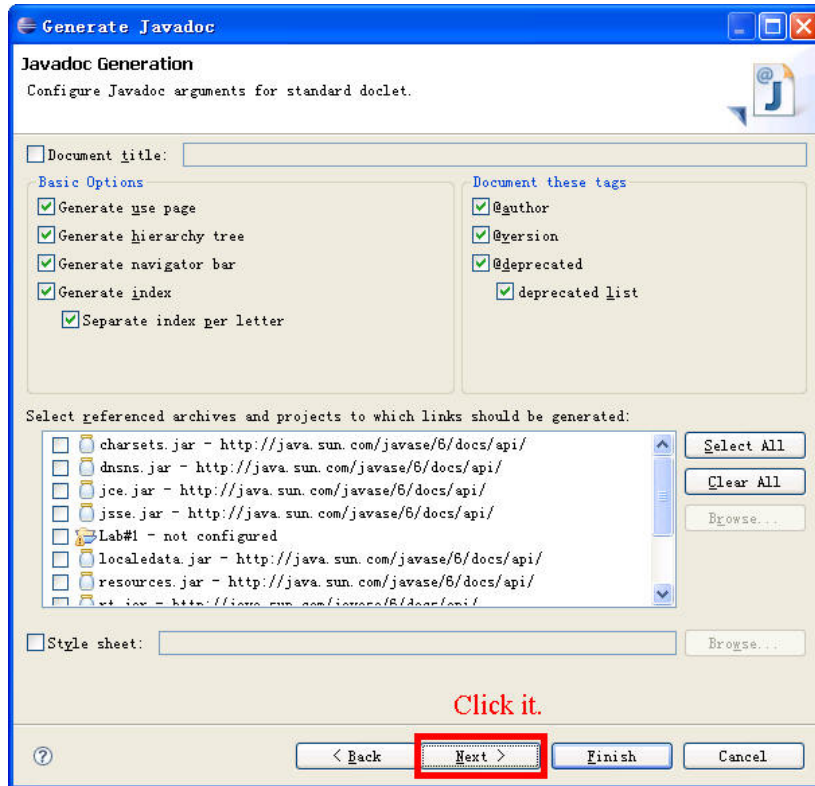
This window keeps the defaults (or should, at least). Double-check that your selections are the same as above, though, just to be sure.

There is one thing you need to change, however. Since we have to submit a copy of various assignments for accreditation purposes, and we cannot have any personally identifying information on the submitted assignments, we do not want you to include the @author tags. By default, it will be selected, but if you included the tags in your source code (which we will be telling you NOT to do), you need to de-select the option here so that it does not show up. Note that we do not want you to include it on your source code either, so changing this default is really just keeping in line with our overall policy. You will include a cover sheet (to be described later) that details exactly who did what.

Javadoc Step 5 – Format the output and create the Javadoc
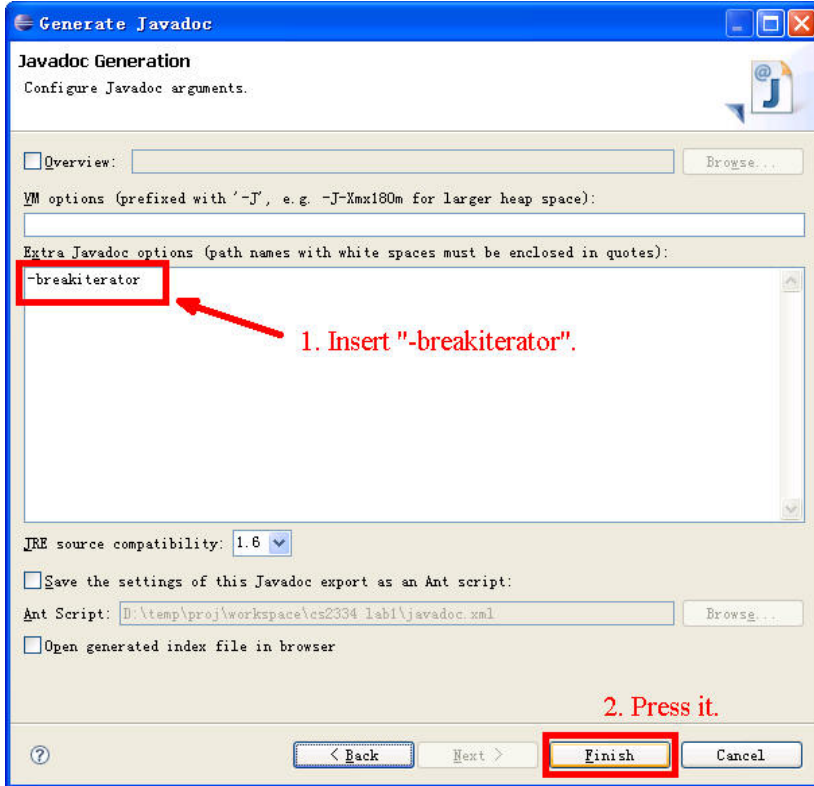
Be sure to insert "-breakiterator" (without quotes) as shown above. This will format the Javadoc appropriately. The rest of the options should be the default. Press the Finish button to create the Javadoc.

Javadoc Step 6 – Finding the resulting Javadoc
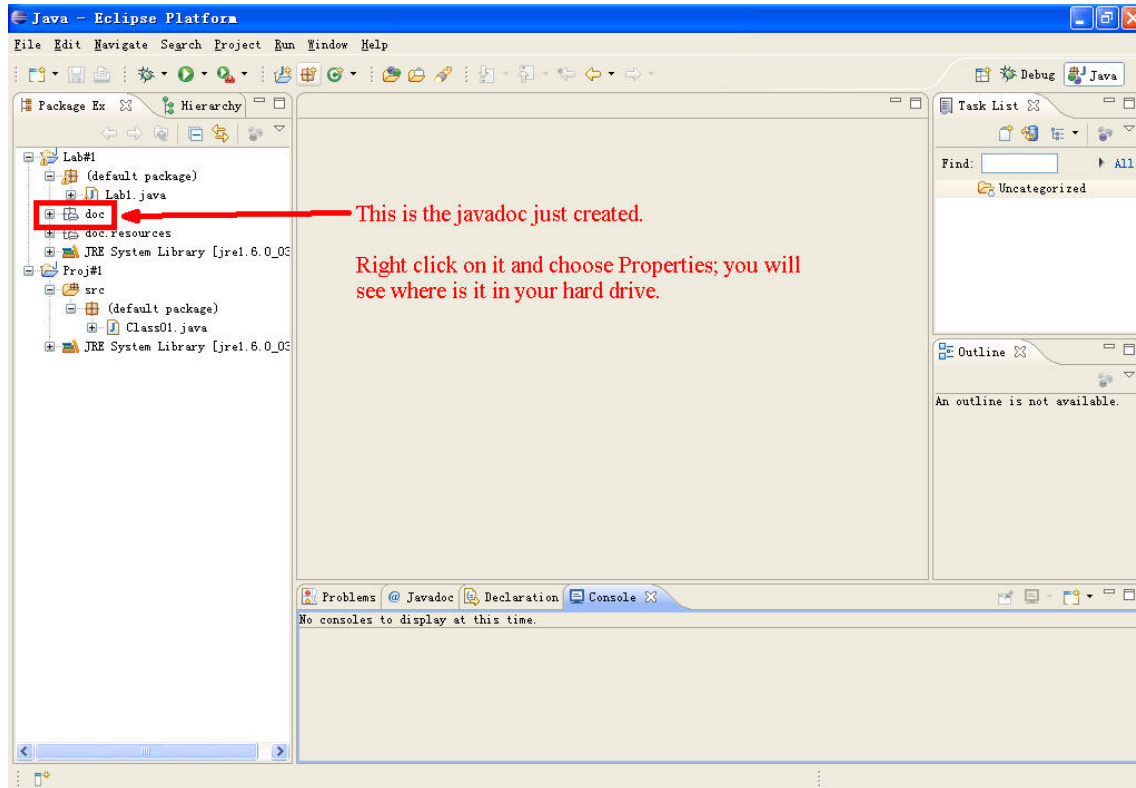
After running this wizard, you should have the Javadoc show up under a directory named "doc" in your project. Look at your "package explorer" (the left-hand window pane that allows you to browse the contents of any project), and it should be there. You can even right-click on the doc directory and choose "properties" to discover the full path to your Javadoc, as it resides on the hard drive.

This ends our instructions on how to create Javadoc. Please ask a TA if you have any more questions, and do it soon, as we will be creating Javadoc many times this semester, and it is part of your grade.

## *Section B – Creating an Eclipse Project Archive:*

The following instructions will walk you through the process of creating an Eclipse project archive. We will be submitting all programming assignments as Eclipse archives, so please pay attention to the steps. In addition, the projects will have extra documentation that needs to be submitted, and if it is missing, you will lose points. Please follow the instructions exactly. Before we show how to export an Eclipse project, here is what needs to be submitted for the three types of programming assignments we will have this semester:

1. **Lab assignments**—Lab assignments will consist of short and very specific exercises that supplement course material. Often, starting source code is provided to the student, with the expectation that the student will write code that will enable the existing program to function properly. Detailed instructions are given with each lab. When the lab assignment is finished, the group needs to hand in the "hard copy" (printed handout), and submit the "soft copy" electronically to the appropriate dropbox on the D2L website (http://learn.ou.edu). For labs, the soft copy should only contain the project archive (discussed below), and nothing else.

2. **Project Designs**—Once a project has been assigned, each individual (Projects 1 and 5) or group (Projects 2 – 4) will have a specific amount of time to submit both a hard copy and a soft copy of the project design. This design does not need to be final; it may fluctuate and change significantly before the project is finished. What this design should reflect, however, is a carefully thought-out plan as to how the project specifications will be reached. This means that a good amount of time should be put in before any code is written. In fact, no code is allowed to be written inside the project design methods. This is called "stubbing" your code. Variables should be declared, methods should have their signatures (names, parameters, and return types), and comments describing each method should be present in the stub code. Along with the stub code of the software system designed you should include fully implemented unit testing code. This code will use JUnit and there should be at least one unit test for every non-trivial unit (method) in the design. The hard copy should contain a printout the cover sheet, stubs, unit tests, and UML. The soft copy should include the cover sheet, stubs, unit tests, UML, and Javadoc.

3. **Final Project**—When the final, working project is submitted, the hard copy should contain a printout of the cover sheet, UML, fully implemented source code, and unit tests. The soft copy should have all of these, and the Javadoc.

The proper format and content of these items will be elaborated on in the _Documentation Requirements_ file (and in class), but for now, you should concern yourself primarily with what to submit with each assignment, both hard copy and soft.

Archive Step 1 – Select and name the project
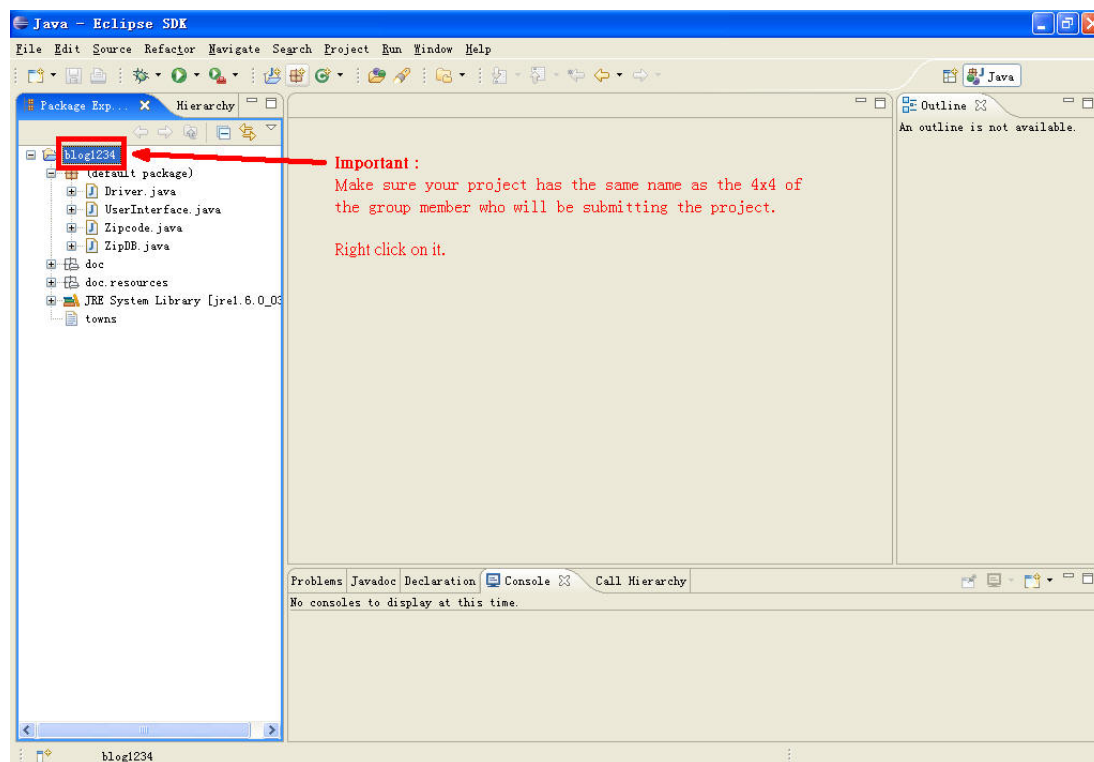
Make sure the project has the correct name, and then select it by using a right click.

Archive Step 2 – Choose the export option
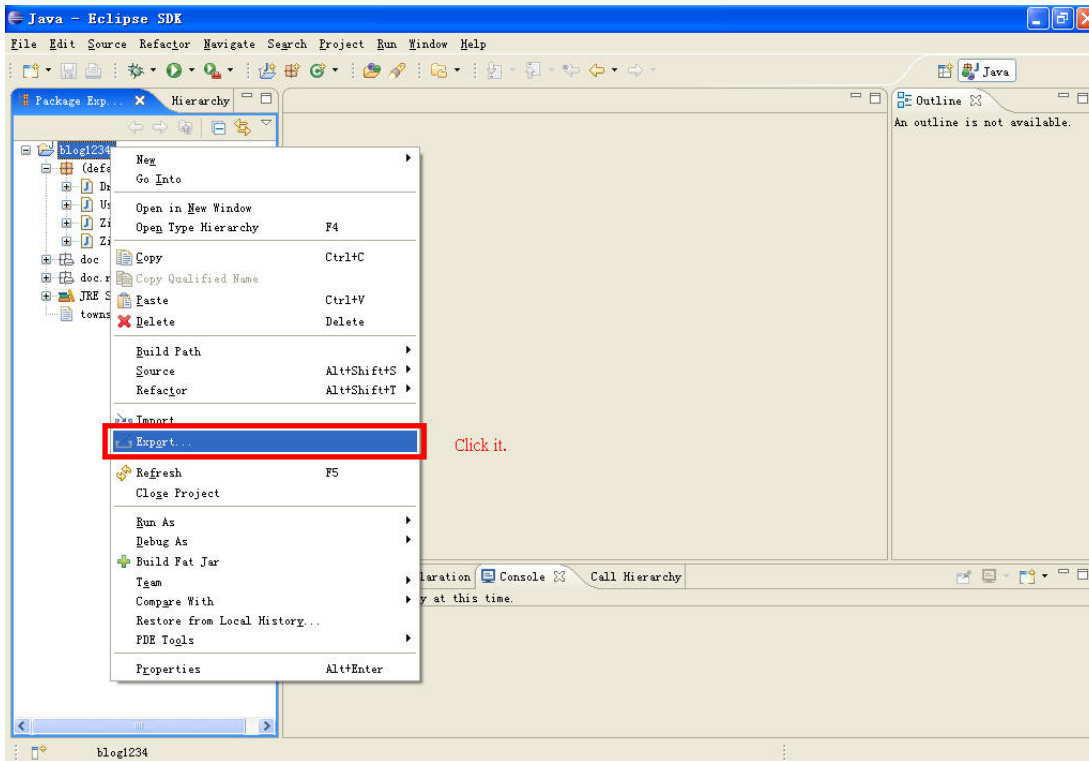
Please use the wizard; do not try to archive the file via a third party application; the grader might not have the same program as you, or the application may not include the hidden configuration files that Eclipse uses to define the project.

Archive Step 3 – Choose the correct format
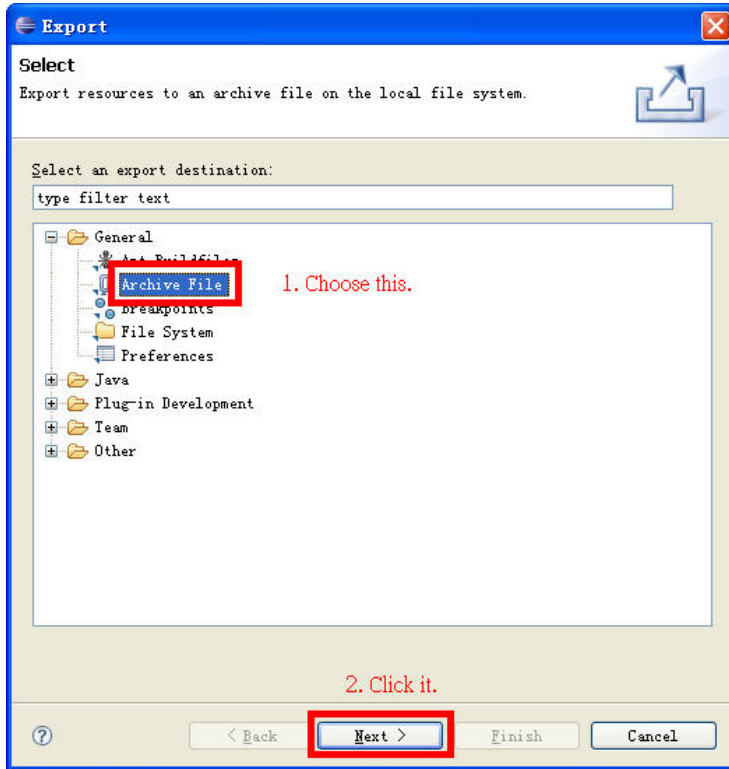
Make sure to choose the archive file; we will be exporting the project to a zip file. Also note that our format falls under the "General" section; not the "Java" section.

Archive Step 4 – Choose the destination and run the export
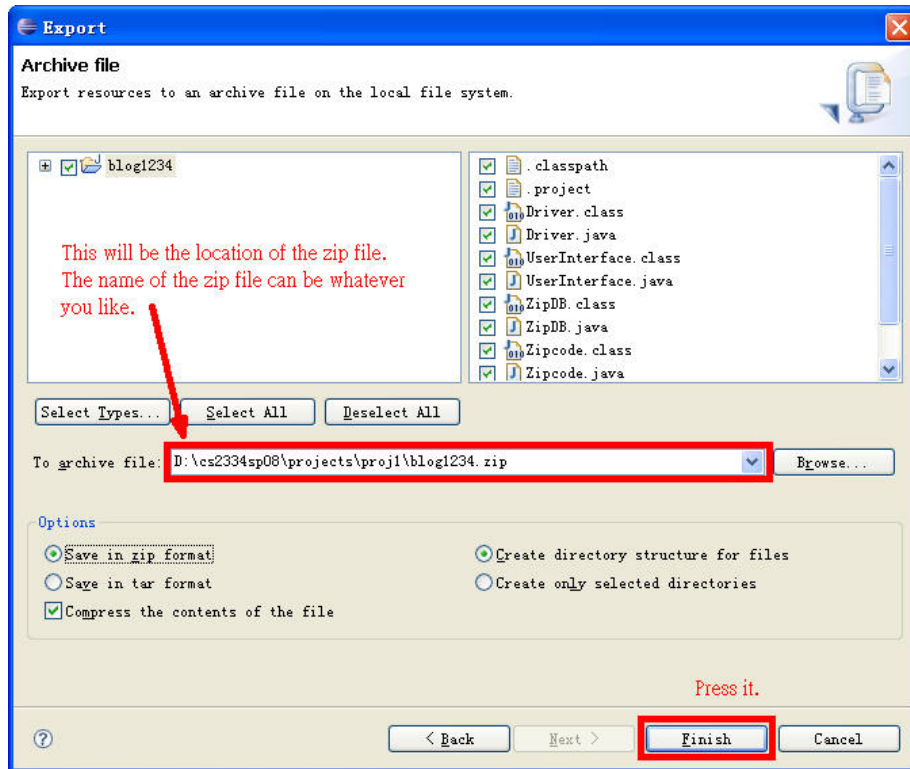
Note that the project we have selected for export is selected for us in the upper-left pane. Also note that all of the files in the project's directory should be selected. This is the point where you should ensure that non-source code files (such as the Javadoc and your UML, and possibly the Milestones file) are also selected for export. Then, choose your destination and remember it, since this is where you will find your zip file to upload to D2L. By default, you should have the zip format selected, and the other options you see above. If not, then choose them. As shown, you can name the zip whatever you like, since once decompressed, it will have a folder that is named the name of your project. Usually, students name it the same as their project. Finally, press the Finish button, and you are done!