

# Lab 0 — Java Review

CS 205

Lab objectives:

- Create, edit and run a Java application in Eclipse
- Generate documentation using Javadoc
- Apply pair-programming techniques to a task

You will do some simple practice with Java on Eclipse with a partner. As you embark on this lab you should practice the pair programming techniques that we have discussed. Switch driver and navigator roles at least once and make sure that you are talking to each other throughout this exercise.

1. Download the lab0Starter zip file from the course web site.
2. Launch Eclipse and create a new Java project by selecting File-Import-General-Existing Projects into Workspace. Click Next. Make sure Select archive file is selected and browse to the downloaded zip file. Click Finish.
3. Examine the two source files and verify that you understand all the code.
4. Run the GreeterTester main program by right-clicking GreeterTester and select Run As-Java Application. The output will appear in the console.
5. Observe the Javadoc comments that are in the form `/** ... */`. These comments contain tags like `@param` and `@return` which will generate the appropriate documentation. Generate javadoc documentation by right-clicking the default package in the Package Explorer pane and selecting Export-Java-Javadoc. In the dialog window, use the Configure button to navigate to the javadoc program, `C:\Program Files\Java\jdk1.8.0_xx\bin\javadoc.exe` (Windows; this will likely be filled-in automatically on Mac and Linux). Next, select the destination for the doclet (usually a `doc` folder inside your project folder). Finally, click Finish. Check the generated documentation.
6. In the Greeter class add a `sayGoodbye` method. You can easily add the javadoc comments by right-clicking in the declaration line of the method and selecting Source-Generate Element Comment. Sorry, but you still have to type in the content of the comment. Add code in GreeterTester to test this method and also generate the new javadoc documentation that includes this method.
7. Add a method `void swapNames(Greeter other)` in the Greeter class that swaps the names of this greeter with another. Test this and complete the javadoc.
8. Make sure that the javadoc comments in your files indicate both members of the pair. (The javadoc `@author` tag is handy for this.) When both are satisfied with your project and documentation, export the project (right-click on Lab0 in the Package Explorer pane, select Export-General-Archive File) and submit one copy in GoucherLearn.