

Please bring the laptop carts to class today. If a student wants to borrow a laptop, I suggest holding onto his/her ID card until the laptop is returned at the end of class. Please allow enough time at the end of class for students to:

1. Erase their work from the laptop. **IMPORTANT: On days where students will connect to their CVS repository via the laptop it is VITAL that they remove their Eclipse CVS connection from the laptop. Otherwise other students can access their subsequent solutions to projects!!** To remove a CVS connection, first delete any projects that were created (in Java perspective) and then remove the CVS connection itself (in CVS perspective).
2. Return the laptops to you and recover their ID cards.

The focus of this lab is on reviewing the Eclipse debugger. Some of the students have seen some of this material before. I doubt there is any student who has seen all of it, and there are surely many students who have seen none of it. I suggest having students try these things out themselves as you explain them and demonstrate them on the screen:

1. Checkout the project called 132Spring13Week02LabMon (this has been distributed to ALL CVS repositories). There is nothing special about this project – it is just some code to use as you experiment with the debugger.
2. Practice setting a breakpoint and using the standard debugger controls:
 - Step over
 - Step into
 - Resume
 - Step return
3. Show how clicking on various entries on the stack (on the left) shows us the history of method calls.
4. Show how to view variables and instance data in the variables window.
 - Talk about how toString is automatically called when you click an entry and view its state at the bottom of the window
 - Demonstrate how ArrayList looks in the window
5. Show how to set a conditional breakpoint:
 - Right-click on the breakpoint, click Breakpoint properties. Check the box “Enable Condition”. Enter some expression in the box. Note that below you can either choose to suspend when the condition is true, or when the value of the expression changes. Choose one.
 - Demonstrate
6. Show how to use the breakpoint “hit count” feature:
 - Right-click breakpoint and click breakpoint properties.
 - Check the “Hit Count” box and enter an integer.
 - Demonstrate
7. Show how to create a “Watch Expression”:
 - Choose Window, Show View, Expressions
 - Right-click in the Expressions window and choose “Add Watch Expression”.
 - Type in some expression (not just a variable, but something more complicated) .
 - Demonstrate.