

## Lab 2: The Silver Dollar Game

**DUE: Monday, 20 Feb, 10:00am**

### Lab Preparation ---

Always read each lab handout all the way through *at least once* in preparation for lab. Also try to sketch out an approach you will take to the problem. This will save you considerable time in lab and make lab much more productive for you.

**To turn in for Wed, 1pm:** Do section 2.5 in the textbook. You'll write javadoc comments and generate javadoc for the code and turn it in. Create a directory for the code and javadoc, and turn in a gzipped tar file of the directory. I'll post the code on the course website that you will add comments to (and you can cut and paste it into emacs).

### Java Review ---

This week, we will write the Silver Dollar Game at the end of Chapter 3. Before lab, you should figure out the approach you will take. You should come up with a plan keeping the following issues in mind.

For your plan, you should first decide on an internal representation of the coin strip. Make sure your representation supports all of the operations necessary, i.e., testing for a legal move, printing the board, testing for a win, moving pieces easily, etc. You should think about alternative designs and be able to justify your decisions. You may read ahead a little to Vectors if you like, but the lab can be implemented with arrays.

Once you have decided on a representation, write down the set of operations supported by your data structure. In other words, what are the public methods of `CoinStrip`, and what do they do? You should create a plan which includes both a description of the representation and the operations on it.

As in all labs, you will be graded on design, documentation, style, and correctness. Be sure to document your program with appropriate comments (use Javadoc!), including a general description at the top of the file, a description of each method with pre- and post-conditions where appropriate. Also use comments and descriptive variable names to clarify sections of the code which may not be clear to someone trying to understand it.

Finally, answer the thought questions at the end of the lab. Put your answers in the file `lab2.txt` and submit that file as well.

### Submitting Your Work ---

Write your program in a file named `CoinStrip.java`. Be sure your name is at the top of the file as part of a comment. When you have finished the program, create a gzipped tar file of the directory and then submit it using the `turnin` utility. For example: `turnin -c 136 00skw_lab2.tar.gz`.