**Programming Assignment 4 Rubric**

**Lab Report –** 15 pts (20 pts if not demoing)   
Demo **-** 5 pts  
Program **-** 80 pts  
Total- 100 pts

**Requirements:**

1. All requirements from programming assignment 3 must be met (up to -30)
2. Passwords are not implemented in the bank (-5)
3. New users are not able to set up a password (-5)
4. Printable Interface is within your program
   1. Interface is completely missing (-10)
   2. Has fewer than 3 methods (-4)
   3. Is used by fewer than 2 classes (-3)
5. User interface is not self-explanatory; options are unclear or unexpected errors happen when interacting with the (console-based) UI (-5)
6. System must use a design pattern
   1. No design pattern present (-10)
   2. Poor implementation of a design pattern (-5)
7. Objects should have relationships with other classes/other objects (-10)
8. Does not follow open-closed principle (-5)
9. Handle receiving an input file that does not have a standard order for the columns (-5)
10. Transaction reader
    1. Transaction reader is completely missing (-10)
    2. Reads the file but is unable to perform all actions (-5)
    3. Reads the file and performs actions but doesn’t notify user about failed transactions (-2)
11. Generate updated balance sheet and this must not overwrite the input file (-5)
12. Handle all exceptions appropriately
    1. No exception handling at all (-10)
    2. No student-created exception
13. Program must contain Javadoc comments and source folder with all .html Javadoc files
    1. Javadoc not created (-10)
    2. Javadoc comments don’t the name of the person who created each method (-5)
    3. Contains Javadoc comments but no generated doc file (-5)
14. Demo with another group missing (-5)
15. **Only if you turn in late.** 
    1. Submission is up to 24 hours late (-15)
    2. Did not explain why it was late in the lab report (-5)