Project 1: Adding Source Code and Grading CSE-150-01

You are encouraged to add new classes to your solution as you see fit; the code we provide you is not a complete skeleton for the project. Your project code will be automatically graded. There are two reasons for this:

- 1. An autograder can test your code a lot more thoroughly than a TA can, yielding more fair results.
- 2. An autograder can test your code a lot faster than a TA can.

Of course, there is a tradeoff. Everything that will be tested needs to have a standard interface that the autograder can use, leaving slightly less room for you to be creative. Your code must strictly follow these interfaces (the documented *Interface classes).

Since your submissions will be processed by a program, there are some very important things you must do, as well as things you must not do. For all the projects in this course:

- 1. Do not modify Makefile, except in the test directory to add source files. When grading, we will be using our own Makefile (javac automatically finds source files to compile, so we don't need you to submit a Makefile).
- 2. Only modify nachos.conf according to the project specifications. When grading, we will be using our own nachos.conf. Do not rely on any additional keys being in this file.
- 3. *Do not* modify any classes in the nachos.machine package, the nachos.ag package, or the nachos.security package. Also, do not add any classes to these packages, as they would not be used during grading.
- 4. *Do not* add any new packages to your project. All the classes you submit must reside in the packages we provide.
- 5. *Do not* modify the API for methods that the autograder uses. This is enforced every time you run Nachos by Machine.checkUserClasses(). If an assertion fails there, you will know you have modified an interface that needs to stay the way it was given to you.
- 6. *Do not* directly use Java threads (the <code>java.lang.Thread</code> class). The Nachos security manager will not permit it. All the threads you use should be managed by TCB objects (see the documentation for <code>nachos.machine.TCB</code>).
- 7. *Do not* use the **synchronized** keyword in any of your code. We will **grep** for it and reject any submission that contains it.
- 8. *Do not* directly use Java File objects (in the java.io package). In later projects, when we start dealing with files, you will use a Nachos file system layer.
- 9. Sprinkled throughout the Nachos classes there are some mandatory calls to the autograder. Leave them as they are.