**Topics covered**

1. Variables and operations
   1. Primitive data types
   2. Strings
   3. Variable declaration and assignment
   4. Numeric, augmented, increment/decrement, and boolean operations
2. Logic and Decision Making
3. Loops
4. Arrays
5. Methods
6. Classes
7. Class Relationships
8. Abstract Classes and Interfaces

**Assignment Rubric**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Criteria | Points | Not demonstrated | Developing | Accomplished | Exemplary |
| Functionality | 10 | 0 points  The program does not function at all as expected, according to the directions. | 4 points  The program does not function as expected most of the time. | 8 points  The program functions as expected most of the time. | 10 points  The program functions as expected all the time. |
| Ease of use | 3 | 0 points  The program does not give clear instructions to the user, and its output is not labeled. | 1 point  The program does not give clear instructions to the user, or its output is not labeled. | 2 points  The program gives clear instructions to the user, and its output is labeled most of the time. | 3 points  The program gives clear instructions to the user, and its output is labeled all the time. |
| Code clarity | 3 | 0 points  The program does not demonstrate proper coding practices and is difficult to understand. | 1 point  The program does not demonstrate proper coding practices, or the code is difficult to understand. | 2 points  The program demonstrates proper coding practices and is easy to understand most of the time. | 3 points  The program demonstrates proper coding practices everywhere. Comments are used as needed and the code is easy to understand. |
| Code efficiency | 3 | 0 points  The program is inefficient. | 1 point  The program is mostly inefficient, given the knowledge of the student. | 2 points  The program is efficient most of the time, given the knowledge of the student. | 3 points  The program is very efficient given the knowledge of the student. |
| On time | 1 | 0 points  The assignment was submitted late. |  |  | 1 point  The assignment was submitted on time. |
| Total | 20 |  |  |  |  |

Comments: