

CSC 340 Coding Style Guide

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1. Classes

- 1.1 All Class names should start with a Capital Letter.
- 1.2 The first line of every class should be the package declaration.
- 1.3 A comment block should immediately follow the package declaration that contains the last updated date of the file, a brief description of the class' purpose, and a list of the contributing authors.
- 1.4 All comments should be properly punctuated and grammatically correct.
- 1.5 All comments should precede the referencing code and not exist on the same line as code.
- 1.6 Use in-line comments to separate logical sections of code within a method.

2. Variables

- 2.1 All variables should use the camelCase naming convention.
- 2.2 All variable names should be descriptive of their purpose.
- 2.3 All parameter variables should begin with an underscore.
- 2.4 References to all class instance properties should be explicitly referred to as belonging to **this** object. Example:

```
this.myVariable;
```

- 2.5 There should be a space between the variable name, equal signs and other variables, methods or literals. Example:

```
this.myVariable = "15";
```

2.6 All variables should be declared protected or private and should be referenced by getters and setters.

3. Methods

3.1 Method names should also be styled in camel case with the first letter being lower-case.

3.2 Methods should not be more than 30 lines long.

3.3 Getters and Setters should be declared at the bottom of the class and separated from other methods by a commented double-dash line (equal character). Example:.

```
//===== GETTERS =====
```

```
//===== SETTERS =====
```

3.4 After the constructor, all publically accessible methods should be declared first followed by protected and private methods.

4. Braces and Parentheses

4.1 All opening braces should exist on the same line as their function or method declaration. This applies to if-then statements, switches, class declarations, method declarations... etc.

4.2 Opening braces should have a preceding space.

4.3 Closing braces should appear on the same column as the first character of the function declaration.

Example:

```
public void myMethod (int _myParameter, 0int _a) {  
    if (_myParameter == 4) {  
        System.out.println("The parameter is  
four.");  
    }  
}
```

5. Whitespace and Tabs

5.1 All interior code should be tabbed appropriately.

5.2 There should be a preceding space before all parameter declarations after the first parameter.

5.3 There should be spaces before and after equal signs or any other comparators, logical operators or mathematical operators.

5.4 There should be no trailing whitespace.

5.5 There should be a single blank line separating methods.