

Team Twenty-Hats General Coding and Style Standards

Programming Language:

- Java will be used for all code submissions.

Naming Conventions:

- Standard java capitalization standards will be used for all variables, classes, and methods.

Ex: ExampleClassA, aMethodToCall, aRandomVariable

- Method, variable, and class names will be intent revealing.

Comment Conventions:

- Team name and team member names will be commented at the top of every source file.
- A brief description of the class will be included at the top of class files unless the class is trivial.
- Comment blocks at the top of files will use the following format:

```
/* Team Name
 * Members names
 *
 * Brief Description
 */
```

- If a comment is required for a method it will use the following format and should be no longer than two lines:

```
//This method does things
public void doThings() {
```

- A commented line of equal signs will be placed between each method.

Bracket Use:

- Opening brackets will be on the same line as the block of code they are opening, and closing brackets will be on the line below the last line of the block of code.

```
Ex: public void method() {  
    System.out.println("Hello World");  
}
```

- If/else blocks will be formatted as follows:

```
Ex: if(true) {  
    doThat();  
    doAnother();  
} else {  
    doThis();  
    doBlah();  
}
```

- If an if statement contains only one line of executable code, no brackets will be used.

Loop Formatting:

- For simple loops will use the variable name i. Variable names for nested loops will continue alphabetically.
- A single space will separate variables and arithmetic operators.

```
Ex: for(int i = 0; i <= 8; i++) {  
    for(int j = 0; j < 9; j++) {  
        System.out.print(i + j);  
    }  
}
```

- More complex loops may use more definitive counter variable names.

Arithmetic Operators Formatting:

- A space will always separate the arithmetic operator from the variables it is dealing with, excluding unary operators.

```
Ex:  varOne + varTwo  
     array[i + 1]  
     int aVar = varOne + varTwo
```

Switch Statement Formatting:

- Switch statements will be on a single line if it only contains simple operations.
- Complex switch statements will be formatted with the case on one line and the executable code on following lines.