**AstroNATS Coding Standards**

**Naming**

**Global Naming Convention**

* Follow camelcase rule
  + Names must be capitalized on every different word, except for the first word / letter

**Naming of Functions**

* Function names must start with verb (ex. printSomething( String sType );).
* Function name must describe what it does.

**Naming of Variables**

* Variable names must start with the first letter of its type (ex. String sCost, Char cInput).
  + With the exception of int, where ‘n’ should be used, denoting ‘number’

(ex. int nNum, nCount;)

* For integers, single lettered variables are allowed for iteration purposes, however, it is highly encouraged to use more detailed variables names

(ex. instead of i, nCounter can be used)

* Variable name must describe what it is for.

**Naming of UI Elements**

* UI Elements should start with the element name then followed by the element kind (ex. JLabel nameLabel, cityLabel;

JComboBox typeComboBox, monthComboBox;

JTextField cityTextField; )

**Function Structure**

* Bracket for the inside of the function must start after the line of the name of the function.

(Ex. printSomething( String sType )

{})

**Variable Declaration**

* Variables of the same type should be grouped together in one line
  + however, variables of the same type, but different purpose could be separated.

(ex. int i, j = 1, k;

int nTotal, nTemp;

char cDump, cInput;)

* GLOBAL VARIABLES ARE HIGHLY DISCOURAGED. It will only be used once agreed upon by the QA team. (?)
* Variables for exclusive use in the for-loop, should be declared in the for-loop

(ex. for( int i = 0; i < n; i++ ) )

**Spacing**

* Tab size should be 5
* Use tabs, rather than spaces, for indentions
* For every conditional statement or loop that is stacked upon each other, indention is a must for everything that is inside.

(ex. for(;;)

{

doMarquee( String sMarquee );

if(true)

{

sayBlah();

while(true)

{

sayAstroNATS();

}

}

}

)

* Don’t forget to place a space in between:
  + Parentheses
    - For functions, conditional statements, loops
    - Function parameters
  + Logical operators
  + Symbols

(ex. int i = 0;

void printSomething( String s )

{}

if( x == 0 && y == 1 )

()

for( int i = 0; i < x + y; i++ );

int nCount, nTotal; )

* Put a 1 line space to separate different major processes

(ex. if()

{}

System.out.println(“This”);

for()

{} )

**Comments**

* Comments are highly encouraged, especially if the function is a little long or complicated
* Feedback / Comments regarding any part of the code can be placed inside comments, so everyone can see.

**Error Handling**