CODING PRINCIPLE OF OUR SQA PROJECT

Hall Management System

**Naming Conventions**

1. Variable names must be in lowercase.

**Example**: librarysystem, myname, studentId

2. Names representing constants (final variables) must be all uppercase using underscore to separate words.

**Example**: MAX\_VALUE, PI, MIN\_VALUE, DEFAULT\_TIMEOUT, ERROR\_CODE, DATABASE\_NAME.

3. Class names should normally use the Pascal Casing convention.

**Example**: BankAccount, CarCompany.

4. The interface name should be Camel Casing convention

**Example**:

interface myInterface {

// declare constant fields

}

5.Names representing methods must be verbs and written in Camel case starting with lower case.

**Example**: getName(), getId(), calculateTotalSalary().

6. Private class variables should have an underscore (\_) prefix.

**Example**:

class Car{

private String \_carcompany;

}

7. Arrays should be declared with their brackets next to the variable name.

**Example**: double names[];

**Specific Naming Conventions**

1. is prefix should be used for boolean variables and methods.

**Example**:

isSet, isVisible, isFinished, isFound, isOpen

2. Plural form should be used on names representing a collection of objects.

**Example**:

int values[];

3. n prefix should be used for variables representing several objects.

**Example**: nPoints, nLines

4. No suffix should be used for variables representing an entity number.

Example: tableNo, employeeNo

**Exception Names**:

Because exceptions should be classes, the class naming convention applies here. However, you should use the suffix “Error” on your exception names (if the exception is an error).

**Types:**

Type conversions must always be done explicitly. Never rely on implicit type conversion.

**Example:**

float Value = (float) intValue;

**Loops**:

1. Loop control statements must be included in the for() or while() construction.

Example: for Loop:

sum = 0; for (i = 0; i < 100; i++) sum += value[i];

while Loop: boolean isDone = false; while (!isDone) { }

**Layout:**

1. Basic indentation should be 2.

**Example**:

for (i = 0; i < nElements; i++) a[i] = 0;

2. The if-else class of statements should have the following form:

**Example:**

if (condition) { statements; } else

{ statements; }

3. A try-catch statement should have the following form:

**Example:**

try

{ statements; } catch (Exception exception)

{ statements; } finally

{ statements; }

**White Space**

Operators should be surrounded by a space character.

• Reserved words should be followed by a white space.

• Commas should be followed by a white space.

• Colons should be surrounded by white space.

• Semicolons in for statements should be followed by a space character.

Example:

a = (b + c) \* d;

while (true) { doSomething (a, b, c, d); case 100 : for (i = 0; i < 10; i++) { }

**Variable Ordering:**

Class variable's order should be Public, Protected, and Private.

**Method Ordering:**

Methods order should be Constructor, Public method, Protected method, and Private method.