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.