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| **No.** | **Description** | **Detail, Reason & Example** | **How to use** |
| 01 | Use the default Code Editor settings in Visual Studio 2012 | **Reason:** Easy to setup and control source code  **Example**: Smart indenting, four-character indents, tabs saved as spaces… | Tools, Options, Text Editor, C# Formatting |
| 02 | Use the default Code Editor settings in Eclipse | **Reason:** Easy to setup and control source code  **Example**: appearance color, annotations… | Windows, Preferences, General, Text Editors |
| 03 | Display line number | **Reason:** It helps on work effort management and debugging process  **Example**: appearance color, annotations, | Check on display line number on Code Editor Settings |
| 04 | Don’t Ignore Exception | **Reason:** It helps on debugging and error controlling  **Example :**  **try**{  //Doing something  }**catch**(IOException i){  //Error Message  }**Finally**{  } | N/A |
| 05 | Don’t catch generic Exception | **Reason:** Programmers have to know exactly what type of Exception and where to catch Exception  **Example:**  **try**{  someComplicateIOFunction();  // may throw or catch IOException  loadData();  // may throw or catch SqlException  }**catch**(IOException i){  //Error Message    }**finally**{  } | N/A |
| 06 | Full qualify imports | **Reason:** save the time to fix import error, reduce the number of import statements and improve effort  **Example:**  **import** android.widget.\*; | N/A |
| 07 | Create a variable for iterating before the loop | **Reason:** improve program performance  **Example:**  Wrong  **for** (x = 0; x < rows.count(); x++) {  // Doing something  }    Right  **int** rowsNum = rows.count();  **for** (x = 0; x < rowsNum; x++) {  // Doing something  }  In the wrong example, every loop the count() function will run, which can be very expensive for some collection. In the right example, the count() function will only run once. | N/A |
| 08 | Don’t initialize variable inside loops | **Reason**: improve program performance  **Example:**  Wrong  **for** (x = 0; x < rows.count(); x++) {  User user = **new** User(); System.out.print(user.UserId);  }    Right  User user = **new** User();  **for** (x = 0; x < rowsNum; x++) {  System.out.print(user.UserId);  }  In the wrong example, every loop the User class is initialized, which waste processor and memory. | N/A |
| 09 | Put open brace with preceding | **Reason:** make the code more clearly  **Example:**  **if**(s == "abc" && s == "cba"){  // Doing something  } | N/A |
| 10 | Variable naming convention | **Details:**   * Non-public, non-static field names with m * Static field names start with s * Other fields start with a lower case letter * The name of array variable must be plural noun   **Reason:** Make the code easier to understand  **Example:**  **public** String firstName;  **int** mAge;  **private** **static** **final** String *sMessage*;  **public** List<User> users; | N/A |
| 11 | Method naming convention | **Detail:**   * Name of methods have to start with verb. * Verb begin in upper case if it’s public and lower case or preceded by underscore (\_)   **Reason:** Make the code easier to understand  **Example:**  **public** **void** DisplayMessage(String s) {  }  **private** **void** \_displayMessage(String s) {  } | N/A |
| 12 | Class naming convention | **Detail:** Beginning with upper case  **Reason:** Make the code easier to understand  **Example:** User, Task | N/A |
| 13 | Interface naming convention | **Detail:** Beginning with I character  **Reason:** Make the code easier to understand  **Example:**  IUser | N/A |
| 14 | Use #region and #endregion to tidy up | Reason: Make the code easier to view  Example:  #region  public int Add(int x, int y){  throw new NotImplementedException();  }  #endregion | Visual Studio |
| 15 | Don’t use magic number or raw string, create a constant for them | Reason: Make the code easier to understand  Example:  Wrong  **if** (a == 5) {  b = "This is type a";  }  Right  **const** TYPE\_A = 5;  **const** TYPE\_A\_NOTICE = "This is type a";  **if** (a == TYPE\_A){  b = TYPE\_A\_NOTICE;  } | N/A |
| 16 | Use standard comments | Reason: Helps programmers and reviewer to understand source code  Example:  /\*\* Return the correctly rounded positive square root of a double value.  \*/    **static** **double** sqrt(**double** a) {  } | N/A |