Minimum coding standards for submitted work in Java

This document lays out some simple standards for Java coding work. Coursework marks will be lost for not following these guidelines.

A. Syntax

1. Class names are Capitalised and Upper-Camel-Cased for compound names.

```
public class EmailApplication {
}
```

2. Object, variable and method names are lower case, and lower-Camel-Cased if names are compound words.

```
EmailApplication myEmail = new EmailApplication();
int numberOfEmails = 12;
```

3. Classes, variables and methods to have meaningful names

4. Use public/private annotation for all classes, state variables and methods

5. Use a consistent amount of indentation (2 or 4 space) after every open { bracket and revert back on close }

6. Opening brackets { either all on same line or all on next line. Closing brackets } on next line.

```
public class EmailApplication {

  private int  numberOfEmails = 0;

  public EmailApplication( int number ) {
    numberOfEmails = number;
  }
}
```

Examples of 3.-6. Having the opening brace { on a separate line is also allowed.

7. Documentation/comments – as a minimum each class should have a description of its purpose. All but the simplest methods with obvious names (*e.g.* setters/getters) should have a comment describing their function.

B. Class structure

1. A class should begin with a list of state variables that are assigned default values.
2. This is followed by a constructor that assigns given values to every item of state.
3. Further methods of the class follow this.
4. Generally group getter/setter methods for clarity.