Scala Style Guide

1. Avoid Casts and Type Tests

- NEVER use ***isInstanceOf*** or ***asInstanceOf*** – there is always a better solution
- AVOID using casts – take a step back and think what you want to achieve/rethink the code

2. Indentation

- The standard is to indent using 2 SPACES
- NO tabs for indentation

3. Line Length and Whitespace

- Make sure the lines are not too long(hard to read)
- Introduce some local value bindings

4. Use Local Values to simplify complex Expressions

- Store some arguments in a local value before passing them to the function, when a combined expression grows too big

5. Choose meaningful Names for Methods and Values

- The names of methods, fields and values should be carefully chosen so that the source code is easy to understand
- A method name should make it clear what the method does

6. Common Subexpressions

- AVOID unnecessary invocations of computation-intensive methods
- OPTIMISE by introducing a local value binding

7. Don't Copy-Paste Code

- Copy-pasting code is always a warning for bad style
- There are many disadvantages:
  - ∗ The code is longer and it takes more time to understand
  - ∗ If two parts are not identical, but similar, it is difficult to spot the differences
  - ∗ Maintaining two copies and making sure that they remain synchronized is very error-prone
  - ∗ The amount of work required to make changes to the code is multiplied
- You SHOULD factor out common parts into separate methods instead of copying code

8. Scala doesn't require Semicolons

- Semicolons are required only when writing multiple statements on the same line
- AVOID writing unnecessary semicolons

9. Avoid using Return

- You often don’t need to use explicit returns because control structures such as if are expressions

10. Avoid mutable local Variables

- Purely functional style doesn’t usually have side-effecting operations
- OPTIMISE by rewriting the code using mutable local variables to code with helper functions that take accumulators(NO ***var***)

11. Eliminate redundant *IF* expressions

- AVOID returning the Boolean value of an expression using ***If-Else***