



SOFTWARE DEVELOPMENT

Bachelor's Degree in Computer Science and Engineering

Guided Exercise 2

Alicia Benítez Rogero (100451005)
Beatriz Sonsoles Encinas Muñoz (100451169)
Group 89



INTRODUCTION

This document presents the coding standards for the project UC3MCare and the changes that have been made in order to meet them. The main purpose is to have a clear, visual code so that it is easily understandable. It comprises the rules mentioned in the following section.

CODING STANDARD RULES

1. NAMING STANDARDS

- The names of functions, methods, modules, and classes will be written in PascalCase format
- The name of inline variables and class attributes will be written in camelCase
- The name of variables, arguments, attributes, and class attributes will have any format
- The name of constants will be written in UPPER_CASE format

2. FORMAT STANDARDS

- The maximum length of code per line is 80 characters
- There will be an indent of 4 spaces
- The maximum number of module lines will be 800
- The minimum line length for docstrings will be 6 characters
- 'If' statements will have a maximum of 4 boolean expressions
- The maximum number of nested blocks will be 5

3. FUNCTION AND METHOD STANDARDS

- Functions and methods will have a maximum of 5 parameters
- Functions will support a maximum of 12 branches
- Functions/methods will support a maximum of 15 local functions



- Functions/methods will have at most 6 'return' instructions
- Functions will have a maximum of 50 statements
- Methods will have 20 public methods at most

4. CLASS STANDARDS

- Classes will have 8 parents at most
- Classes will have a maximum of 8 attributes
- Classes will have at least two public methods

PYLINT OUTPUT

After configuring the .pylintrc text file and running pylint, the following output is obtained:

```
PyLint found 1 error, 14 warnings, 19 conventions in 5 files
VaccineManager.py : 1 error, 8 warnings, 5 conventions
  Line too long (92/80) (40:0) [line-too-long]
  Line too long (91/80) (48:0) [line-too-long]
  Quote delimiter ' is inconsistent with the rest of the file (21:0) [inconsistent-quotes]
  Quote delimiter ' is inconsistent with the rest of the file (22:0) [inconsistent-quotes]
  Quote delimiter ' is inconsistent with the rest of the file (23:0) [inconsistent-quotes]
  Missing function or method docstring (17:4) [missing-function-docstring]
  Static method with 'self' as first argument (17:4) [bad-staticmethod-argument]
  Import outside toplevel (re) (20:12) [import-outside-toplevel]
  Consider explicitly re-raising using the 'from' keyword (29:12) [raise-missing-from]
  Unused argument 'self' (17:21) [unused-argument]
  Unused variable 'myUUID' (19:12) [unused-variable]
  Missing function or method docstring (32:4) [missing-function-docstring]
  Using open without explicitly specifying an encoding (35:17) [unspecified-encoding]
  No value for argument 'GUID' in staticmethod call (49:15) [no-value-for-parameter]
VaccineMangementException.py : 2 conventions
  Missing module docstring (1:0) [missing-module-docstring]
  Missing class docstring (1:0) [missing-class-docstring]
VaccineRequest.py : 2 warnings, 2 conventions
  Missing module docstring (1:0) [missing-module-docstring]
  Missing class docstring (5:0) [missing-class-docstring]
  Unused private member 'VaccineRequest._timeStamp' (10:8) [unused-private-member]
  Unused import pandas (3:0) [unused-import]
```



```

  - _init__.py : 1 convention
    - Missing module docstring (1:0) [missing-module-docstring]
  - main.py : 4 warnings, 9 conventions
    - Quote delimiter ' is inconsistent with the rest of the file (12:0) [inconsistent-quotes]
    - Quote delimiter ' is inconsistent with the rest of the file (13:0) [inconsistent-quotes]
    - Quote delimiter ' is inconsistent with the rest of the file (22:0) [inconsistent-quotes]
    - Quote delimiter ' is inconsistent with the rest of the file (23:0) [inconsistent-quotes]
    - Module name "main" doesn't conform to PascalCase naming style ('([^\W\\da-z][^\W_]+$' pattern) (1:0) [invalid-name]
    - Missing module docstring (1:0) [missing-module-docstring]
    - Constant name "letters" doesn't conform to UPPER_CASE naming style ('([^\W\\da-z][^\W_a-z]*_*)$' pattern) (5:0) [invalid-name]
    - Constant name "shift" doesn't conform to UPPER_CASE naming style ('([^\W\\da-z][^\W_a-z]*_*)$' pattern) (6:0) [invalid-name]
    - Missing function or method docstring (9:0) [missing-function-docstring]
    - Missing function or method docstring (19:0) [missing-function-docstring]
    - Function name "main" doesn't conform to PascalCase naming style ('([^\W\\da-z][^\W_]{2,})[_]?[^\W\\dA-Z_](w+)?$' pattern) (29:0) [invalid-name]
    - Missing function or method docstring (29:0) [missing-function-docstring]
    - standard import "import string" should be placed before "from UC3Mcare import VaccineManager" (2:0) [wrong-import-order]

```

After fixing the errors, warnings, and conventions found by pylint, this is the result:

