Checking Your Code Quality With Pylint

Reindert-Jan Ekker
nl.linkedin.com/in/rjekker/
@rjekker

pluralsight
hardcore dev and IT training

Overview

- **Find common errors**

- **Follow standard code style guidelines**

- **PEP8**

- **Pylint**

PEP8: Style Guide for Python Code

- **PEP: Python Enhancement Proposal.**
  - Provide information to the Python community, or
  - Describe a new feature for Python

- **PEP8: Style Guide for Python Code**
  - Code Lay-out
  - Whitespace
  - Comments
  - Naming Conventions

Layout

- **It's about readability**

- **Indentation: 4 spaces per level**

- **Line length max. 79 characters**

- **Blank lines:**
  - 2 lines between top-level functions and classes
  - 1 line between methods inside a class

- **Imports**

- **Use of spaces in expressions**

- **If you don't know the rules, your tools will tell you (mostly)**

Documentation and Naming

- **Docstrings for all public modules, functions, classes and methods**

- **Naming:**
  - Modules: short, lowercase names
  - Classes: CapitalizedNaming
  - Functions and methods: lowercase_with_underscores
  - Constants: ALL_CAPS
  - Non-public names start with underscore

- **Programming Recommendations**
  - … and more
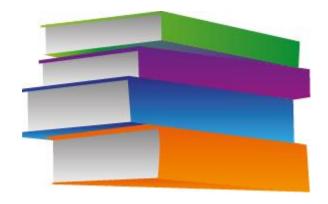
Pylint

- **Static code checker**

- **PEP8**

- **Error detection (code smells)**

- **Code duplication**

- **Very configurable**

- **Integration with many IDE's**

Running pylint

- **`pylint package_or_module`**
  - Only messages: -r n

- **`pylint --help`**

- **`pylint-gui`**

- **Disable messages in your code:**
  - `# pylint: disable=message-name`

- **`pylint --generate-rcfile > pylintrc`**
  - Generates a pylint config file
  - pylintrc in cwd, home directory or per package

Resources

- **PEP8 (http://goo.gl/3KwrkU)**
    - http://legacy.python.org/dev/peps/pep-0008/

- **All PEPs (http://goo.gl/p1vmLf)**
    - http://legacy.python.org/dev/peps/

- **Pylint documentation: http://www.pylint.org**

Summary

- **PEP8**

- **Pylint**