

robbiblubber.org



Python Coding Guidelines

Version 1.0

Introduction

robbiblubber.org coding guidelines typically follow the coding style recommendations and conventions accepted by the community for a specific programming language while trying to maintain common ideas and traditions, especially when denoting scope and visibility of code elements.

Generally, class, member, parameter names should be identical in all language ports of a given piece of code, except for naming style (meaning a method may be called "CopyElement", "copyElement", or "copy_element" in different languages, but should never be named "copy").

All language constructs should always be commented in a way that supports automatic documentation generation.

In this document, rules for protected members also apply to private protected and internal protected. Static and non-static elements follow the same rules.

Each type should be defined in a file with the type name.

1 Visibility

Visibility rules apply to all types and members.

Public types or members are unmarked.

Private, protected, and internal types or members start with a leading underscore.

Types or members that should only be used under specific circumstances start with two leading underscores.

2 Packages

Packages are lower case, starting with "robbiblubber".

3 Types

This chapter defines naming conventions for types.

3.1 Classes

Classes and Structs are always Pascal case. The class name should be a noun or a noun with descriptive attributes.

Classes derived from *Exception* end with "Exception".

3.2 Interfaces

Interfaces are always Pascal case, starting with "I". The interface name should be an adjective if applicable.

3.3 Enumerations

Enumerations are always Pascal case. The name should be singular and should never end with "Enum".

4 Members

This chapter defines naming conventions for type members.

4.1 Fields

Fields are snake case. The field name is typically a noun or adjective.

4.2 Properties

Properties are snake case. The property name is typically a noun or adjective.

4.3 Methods

Methods are snake case. Method names should be verbs.

4.5 Constants and Enumeration Values

Constants and enumeration values are upper case. Especially static read-only properties may be considered constants if this makes sense in the given context.

5 Variables and Parameters

This chapter defines naming conventions for type variables and parameters.

5.1 Variables

Local variables are camel case.

5.2 Parameters

Parameters are camel case.

6 Comments

This chapter describes the usage of comments.

6.1 Documentation Comments

Each type or member should have an docstring documentation comment (""").

6.2 Member Grouping

Fields, constructors, properties, methods, events, overrides should be grouped by a box of hash sign followed by a blank and 78 slashes regarding visibility. Nested types and interface implementations should also be introduced by such a box, named [class|enum]...[override|interface] and type name.

6.3 Code Comments

Inline comments use the hash comment sign (“#”).

7 Example

```
class Example(__SampleBase, IUsable):
    """
    This is an example class for coding guidelines.
    Attributes:
        _some_number (int): A static field.
        _name (string): A field.
    """

    _some_number: int = 42

    # ///////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
    # // constructors                                                                    //
    # ///////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////

    def __init__(self, arg: int):
        """
        Creates a new instance of this class.
        :param arg: Parameter
        """

        self._name = None

    # ///////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
    # // public properties                                                                //
    # ///////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////

    @property
    def name(self) -> string:
        """ Gets or sets the name. """

        return self._name

    @name.setter
    def name(self, value: string):
        self._name = value

    # ///////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
    # // public methods                                                                    //
    # ///////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////

    def generate_number(self) -> int:
        """
        Generates a number.
        :return: Returns a number.
        """

        return Example._some_number;                                     # a comment

    # ///////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
    # // [override] _SomeBase                                                            //
    # ///////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////

    def _init():
        """ Initializes the instance. """
        pass

    # ///////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
    # // [interface] IUsable                                                            //
    # ///////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////

    def use():
        """ Uses the item. """
        pass
```

Sample: Python code

Version History

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