32.9. pyclbr — Python class browser support

Source code: Lib/pyclbr.py

The pyclbr module can be used to determine some limited information about the classes, methods and top-level functions defined in a module. The information provided is sufficient to implement a traditional three-pane class browser. The information is extracted from the source code rather than by importing the module, so this module is safe to use with untrusted code. This restriction makes it impossible to use this module with modules not implemented in Python, including all standard and optional extension modules.

pyclbr.**readmodule**(*module*, *path=None*)

Read a module and return a dictionary mapping class names to class descriptor objects. The parameter *module* should be the name of a module as a string; it may be the name of a module within a package. The *path* parameter should be a sequence, and is used to augment the value of sys.path, which is used to locate module source code.

pyclbr.**readmodule_ex**(*module*, *path=None*)

Like readmodule(), but the returned dictionary, in addition to mapping class names to class descriptor objects, also maps top-level function names to function descriptor objects. Moreover, if the module being read is a package, the key '__path__' in the returned dictionary has as its value a list which contains the package search path.

32.9.1. Class Objects

The Class objects used as values in the dictionary returned by readmodule() and readmodule_ex() provide the following data attributes:

Class.**module**

The name of the module defining the class described by the class descriptor.

Class.**name**

The name of the class.

Class.**super**

A list of Class objects which describe the immediate base classes of the class being described. Classes which are named as superclasses but which are not

discoverable by `readmodule()` are listed as a string with the class name instead of as `Class` objects.

`Class.`**`methods`**
A dictionary mapping method names to line numbers.

`Class.`**`file`**
Name of the file containing the `class` statement defining the class.

`Class.`**`lineno`**
The line number of the `class` statement within the file named by `file`.

32.9.2. Function Objects

The `Function` objects used as values in the dictionary returned by `readmodule_ex()` provide the following attributes:

`Function.`**`module`**
The name of the module defining the function described by the function descriptor.

`Function.`**`name`**
The name of the function.

`Function.`**`file`**
Name of the file containing the `def` statement defining the function.

`Function.`**`lineno`**
The line number of the `def` statement within the file named by `file`.