



## 1. Exploring how deprecated Python library APIs are (not) handled

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**Abstract:** In this paper, we present the first exploratory study of deprecated Python library APIs to understand the status quo of API deprecation in the realm of Python libraries. Specifically, we aim to comprehend how deprecated library APIs are declared and documented in practice by their maintainers, and how library users react to them. By thoroughly looking into six reputed Python libraries and 1,200 GitHub projects, we experimentally observe that API deprecation is poorly handled by library contributors, which subsequently introduce difficulties for Python developers to resolve the usage of deprecated library APIs. This empirical evidence suggests that our community should take immediate actions to appropriately handle the deprecation of Python library APIs. (0 refs)

**Inspec controlled terms:** application program interfaces - public domain software - Python - social aspects of automation - software engineering

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