The Python Standard Library

While <u>:ref: reference-index</u>' describes the exact syntax and semantics of the Python language, this library reference manual describes the standard library that is distributed with Python. It also describes some of the optional components that are commonly included in Python distributions.

```
System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Doc\library\(cpython-main\) (Doc) (library) index.rst, line 7); backlink
```

Unknown interpreted text role "ref".

Python's standard library is very extensive, offering a wide range of facilities as indicated by the long table of contents listed below. The library contains built-in modules (written in C) that provide access to system functionality such as file I/O that would otherwise be inaccessible to Python programmers, as well as modules written in Python that provide standardized solutions for many problems that occur in everyday programming. Some of these modules are explicitly designed to encourage and enhance the portability of Python programs by abstracting away platform-specifics into platform-neutral APIs.

The Python installers for the Windows platform usually include the entire standard library and often also include many additional components. For Unix-like operating systems Python is normally provided as a collection of packages, so it may be necessary to use the packaging tools provided with the operating system to obtain some or all of the optional components.

In addition to the standard library, there is a growing collection of several thousand components (from individual programs and modules to packages and entire application development frameworks), available from the Python Package Index.

```
main\Doc\library\(cpython-main\) (Doc) (library) index.rst, line 38)
Unknown directive type "toctree".
   .. toctree::
     :maxdepth: 2
     intro.rst
     functions.rst
     constants.rst
     stdtvpes.rst
     exceptions.rst
     text.rst
     binary.rst
     datatypes.rst
     numeric.rst
     functional.rst
     filesys.rst
     persistence.rst
     archiving.rst
     fileformats.rst
     crvpto.rst
     allos.rst
     concurrency.rst
     ipc.rst
     netdata.rst
     markup.rst
     internet.rst
     mm.rst
     i18n.rst
     frameworks.rst
     tk.rst
     development.rst
     debug.rst
     distribution.rst
     python.rst
     custominterp.rst
     modules.rst
     language.rst
     windows.rst
     unix.rst
     superseded.rst
     undoc.rst
     security warnings.rst
```