

Werkzeug

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werkzeug German noun: "tool". Etymology: *werk* ("work"), *zeug* ("stuff")

Werkzeug is a comprehensive WSGI (<https://wsgi.readthedocs.io/en/latest/>) web application library. It began as a simple collection of various utilities for WSGI applications and has become one of the most advanced WSGI utility libraries.

Flask (/p/flask) wraps Werkzeug, using it to handle the details of WSGI while providing more structure and patterns for defining powerful applications.

```
from werkzeug.wrappers import Request, Response
```

```
@Request.application
def application(request):
    return Response("Hello, World!")
```

```
if __name__ == "__main__":
    from werkzeug.serving import run_simple
    run_simple("localhost", 5000, application)
```

Werkzeug includes:

- An interactive debugger that allows inspecting stack traces and source code in the browser with an interactive interpreter for any frame in the stack.
- A full-featured request object with objects to interact with headers, query args, form data, files, and cookies.
- A response object that can wrap other WSGI applications and handle streaming data.
- A routing system for matching URLs to endpoints and generating URLs for endpoints, with an extensible system for capturing variables from URLs.
- HTTP utilities to handle entity tags, cache control, dates, user agents, cookies, files, and more.
- A threaded WSGI server for use while developing applications locally.
- A test client for simulating HTTP requests during testing without requiring running a server.

Werkzeug is Unicode aware and doesn't enforce any dependencies. It is up to the developer to choose a template engine, database adapter, and even how to handle requests. It can be used to build all sorts of end user applications such as blogs, wikis, or bulletin boards.

 [pallets/werkzeug \(https://github.com/pallets/werkzeug\)](https://github.com/pallets/werkzeug)

 [Releases on PyPI \(https://pypi.python.org/pypi/Werkzeug\)](https://pypi.python.org/pypi/Werkzeug)

 [Test status \(https://travis-ci.org/pallets/werkzeug\)](https://travis-ci.org/pallets/werkzeug)

 [Documentation \(https://werkzeug.palletsprojects.com/\)](https://werkzeug.palletsprojects.com/)

Latest Release

Version: 1.0.0

 (<https://github.com/pallets/>)  (<https://twitter.com/PalletsTeam/>)  (<https://github.com/pallets/website/tree/master/content/projects/werkzeug/content>)

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