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[![logo](../../assets/logo-letter.svg)](../.. "uv")
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Declaring dependencies
Initializing search
[ uv ](https://github.com/astral-sh/uv "Go to repository")
[![logo](../../assets/logo-letter.svg)](../.. "uv") uv
[ uv ](https://github.com/astral-sh/uv "Go to repository")
 * [Introduction ](../..)
 * [ Getting started ](../../getting-started/)
Getting started
  * [ Installation ](../../getting-started/installation/)
  * [ First steps ](../../getting-started/first-steps/)
  * [ Features ](../../getting-started/features/)
  * [ Getting help ](../../getting-started/help/)
 * [ Guides ](../../guides/)
```

Skip to content

Guides

```
* [Installing Python ](../../guides/install-python/)
  * [ Running scripts ](../../guides/scripts/)
  * [ Using tools ](../../guides/tools/)
  * [ Working on projects ](../../guides/projects/)
  * [ Publishing packages ](../../guides/package/)
  * [ Integrations ](../../guides/integration/)
Integrations
   * [ Docker ](../../guides/integration/docker/)
   * [ Jupyter ](../../guides/integration/jupyter/)
   * [ GitHub Actions ](../../guides/integration/github/)
   * [ GitLab CI/CD ](../../guides/integration/gitlab/)
   * [ Pre-commit ](../../guides/integration/pre-commit/)
   * [ PyTorch ](../../guides/integration/pytorch/)
   * [ FastAPI ](../../guides/integration/fastapi/)
   * [ Alternative indexes ](../../guides/integration/alternative-indexes/)
   * [ Dependency bots ](../../guides/integration/dependency-bots/)
   * [ AWS Lambda ](../../guides/integration/aws-lambda/)
 * [ Concepts ](../../concepts/)
```

Concepts

* [Projects](../../concepts/projects/)

- * [Structure and files](../../concepts/projects/layout/)
- * [Creating projects](../../concepts/projects/init/)
- * [Managing dependencies](../../concepts/projects/dependencies/)
- * [Running commands](../../concepts/projects/run/)
- * [Locking and syncing](../../concepts/projects/sync/)
- * [Configuring projects](../../concepts/projects/config/)
- * [Building distributions](../../concepts/projects/build/)
- * [Using workspaces](../../concepts/projects/workspaces/)
- * [Tools](../../concepts/tools/)
- * [Python versions](../../concepts/python-versions/)
- * [Resolution](../../concepts/resolution/)
- * [Caching](../../concepts/cache/)
- * [Configuration](../../configuration/)

Configuration

- * [Configuration files](../../configuration/files/)
- * [Environment variables](../../configuration/environment/)
- * [Authentication](../../configuration/authentication/)
- * [Package indexes](../../configuration/indexes/)
- * [Installer](../../configuration/installer/)
- * [The pip interface](../)

The pip interface

```
* [ Using environments ](../environments/)
  * [ Managing packages ](../packages/)
  * [Inspecting packages ](../inspection/)
  * Declaring dependencies [ Declaring dependencies ](./) Table of contents
   * Using pyproject.toml
   * Using requirements.in
  * [ Locking environments ](../compile/)
  * [ Compatibility with pip ](../compatibility/)
 * [ Reference ](../../reference/)
Reference
  * [ Commands ](../../reference/cli/)
  * [ Settings ](../../reference/settings/)
  * [ Troubleshooting ](../../reference/troubleshooting/)
Troubleshooting
   * [ Build failures ](../../reference/troubleshooting/build-failures/)
   * [ Reproducible examples ](../../reference/troubleshooting/reproducible-examples/)
  * [ Resolver ](../../reference/resolver-internals/)
  * [ Benchmarks ](../../reference/benchmarks/)
  * [ Policies ](../../reference/policies/)
```

Policies

* [Versioning](../../reference/policies/versioning/)

* [Platform support](../../reference/policies/platforms/) * [License](../../reference/policies/license/) Table of contents * Using pyproject.toml * Using requirements.in 1. [Introduction](../..) 2. [The pip interface](../) # Declaring dependencies It is best practice to declare dependencies in a static file instead of modifying environments with ad-hoc installations. Once dependencies are defined, they can be [locked](../compile/) to create a consistent, reproducible environment. ## Using `pyproject.toml` The 'pyproject.toml' file is the Python standard for defining configuration for a project. To define project dependencies in a 'pyproject.toml' file: pyproject.toml

```
[project]
dependencies = [
  "httpx",
  "ruff>=0.3.0"
]
```

To define optional dependencies in a `pyproject.toml` file:

pyproject.toml

```
[project.optional-dependencies]
cli = [
  "rich",
  "click",
]
```

Each of the keys defines an "extra", which can be installed using the `--extra` and `--all-extras` flags or `package[<extra>]` syntax. See the documentation on [installing packages](../packages/#installing-packages-from-files) for more details.

See the official ['pyproject.toml'
guide](https://packaging.python.org/en/latest/guides/writing-pyproject-toml/)
for more details on getting started with a 'pyproject.toml'.

Using 'requirements.in'

It is also common to use a lightweight 'requirements.txt' format to declare
the dependencies for the project. Each requirement is defined on its own line.

Commonly, this file is called 'requirements.in' to distinguish it from
'requirements.txt' which is used for the locked dependencies.

To define dependencies in a `requirements.in` file:

requirements.in

httpx

ruff>=0.3.0

Optional dependencies groups are not supported in this format.

August 27, 2024

Back to top [Previous Inspecting packages](../inspection/) [Next Locking environments](../compile/)

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](https://discord.com/invite/astral-sh "discord.com") [
](https://pypi.org/project/uv/ "pypi.org") [ ](https://x.com/astral_sh
"x.com")
```