Working on projects

Creating a new project

You can create a new Python project using the uv init command:

```
uv init hello-world
cd hello-world
```

Alternatively, you can initialize a project in the working directory:

```
mkdir hello-world
cd hello-world
uv init
```

uv will create the following files:

```
_____.gitignore
____.python-version
____ README.md
____ main.py
____ pyproject.toml
```

The main.py file contains a simple "Hello world" program. Try it out with uv run:

```
uv run main.py
=> Hello from hello-world!
```

Managing dependencies

You can add dependencies to your pyproject.toml with the uv add command. This will also update the lockfile and project environment:

```
uv add requests
```

You can also specify version constraints or alternative sources:

```
# Specify a version constraint
uv add "requests==2.31.0"

# Add a git dependency
uv add git+https://github.com/psf/requests
```

if you're migrating from a requirements.txt file, you can use uv add with the -r falg to add all dependencies from the file:

```
# Add all dependencies from "requirements.txt"
uv add -r requirements.txt -c constraints.txt
```

To remove a package, you can use uv remove:

```
uv remove requests
```

To upgrade a package, run uv lock with the --upgrade-package flag:

```
uv lock --upgrade-package requests
```

Init Project

```
cd lesson3\temp-project
uv init
# add package
uv add requests
# remove package
uv remove requests
# also, you can build your source
# check dist directory
uv build
```