

Effective Programming Practices for Economists

Basic Python

Running Python code via pytask

Janoś Gabler and Hans-Martin von Gaudecker

Preparation

- We assume you have installed anaconda and created the course environment
- Open a shell in the root directory of your project
 - On Windows, use the anaconda prompt or the powershell
 - If conda is not recognized in the powershell, check out this [stackoverflow post](#)
- Activate the environment using ``conda activate epp``
- Confirm the activation worked using ``conda info``

0: Activate and Info

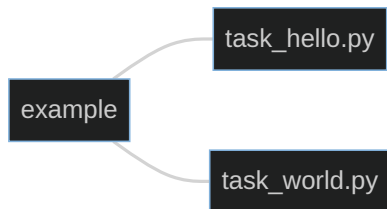


How does pytask execute code?

- Executing .py files: Run the entire file
- Executing notebooks: Run individual cells
- Pytask: Run individual functions in multiple .py files

Very useful for automating research pipelines

Example Project Structure

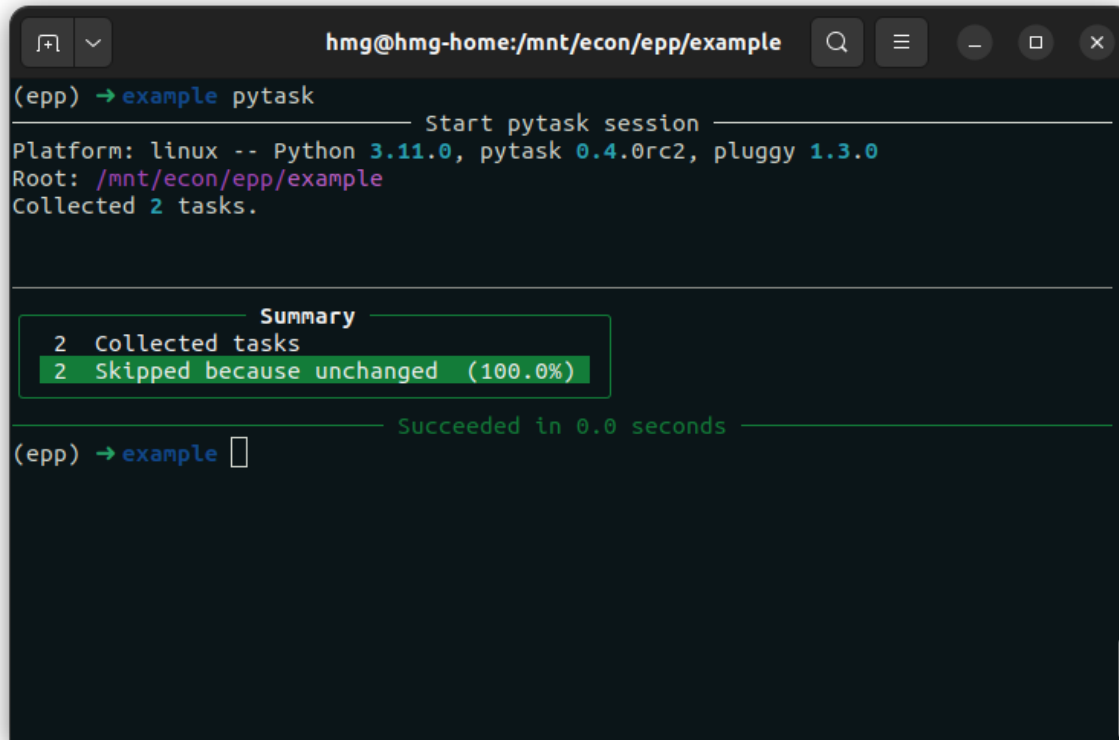


- Our shell is in the `example` directory
- We want to run all functions that start with `task_` in both `.py` files
- Command is `pytask`

1: Execute



1: Execute again



```
hmg@hmg-home:/mnt/econ/epp/example
(epp) → example pytask
Start pytask session
Platform: linux -- Python 3.11.0, pytask 0.4.0rc2, pluggy 1.3.0
Root: /mnt/econ/epp/example
Collected 2 tasks.

Summary
2 Collected tasks
2 Skipped because unchanged (100.0%)

Succeeded in 0.0 seconds
(epp) → example
```

The terminal window shows the execution of the 'pytask' command. It displays the platform (linux), Python version (3.11.0), pytask version (0.4.0rc2), and pluggy version (1.3.0). It also shows the root directory (/mnt/econ/epp/example) and the number of collected tasks (2). A summary box highlights that 2 tasks were collected and 2 tasks were skipped because they were unchanged (100.0%). The execution succeeded in 0.0 seconds.