# Tools of the trade III

### Joachim Vandekerckhove

### today

## Contents

- Introduction to containerization
- Start the class Docker container
- **Connect with VSCode**
- What are SSH keys?

---

## Connecting VSCode to your Docker container

This guide will help you set up Visual Studio Code (VSCode) to connect to your running Docker container. This will allow you to edit and execute code inside the container seamlessly.

---

## Prerequisites

Before you begin, ensure that you have:

1. A **running Docker container** with SSH enabled.

   - Follow the steps in "Start the class Docker container"

2. **VSCode** installed on your computer.

   - Download it from Visual Studio Code.
   - Install the "Remote - SSH" and "Remote - Containers" extensions from the Extensions Marketplace.
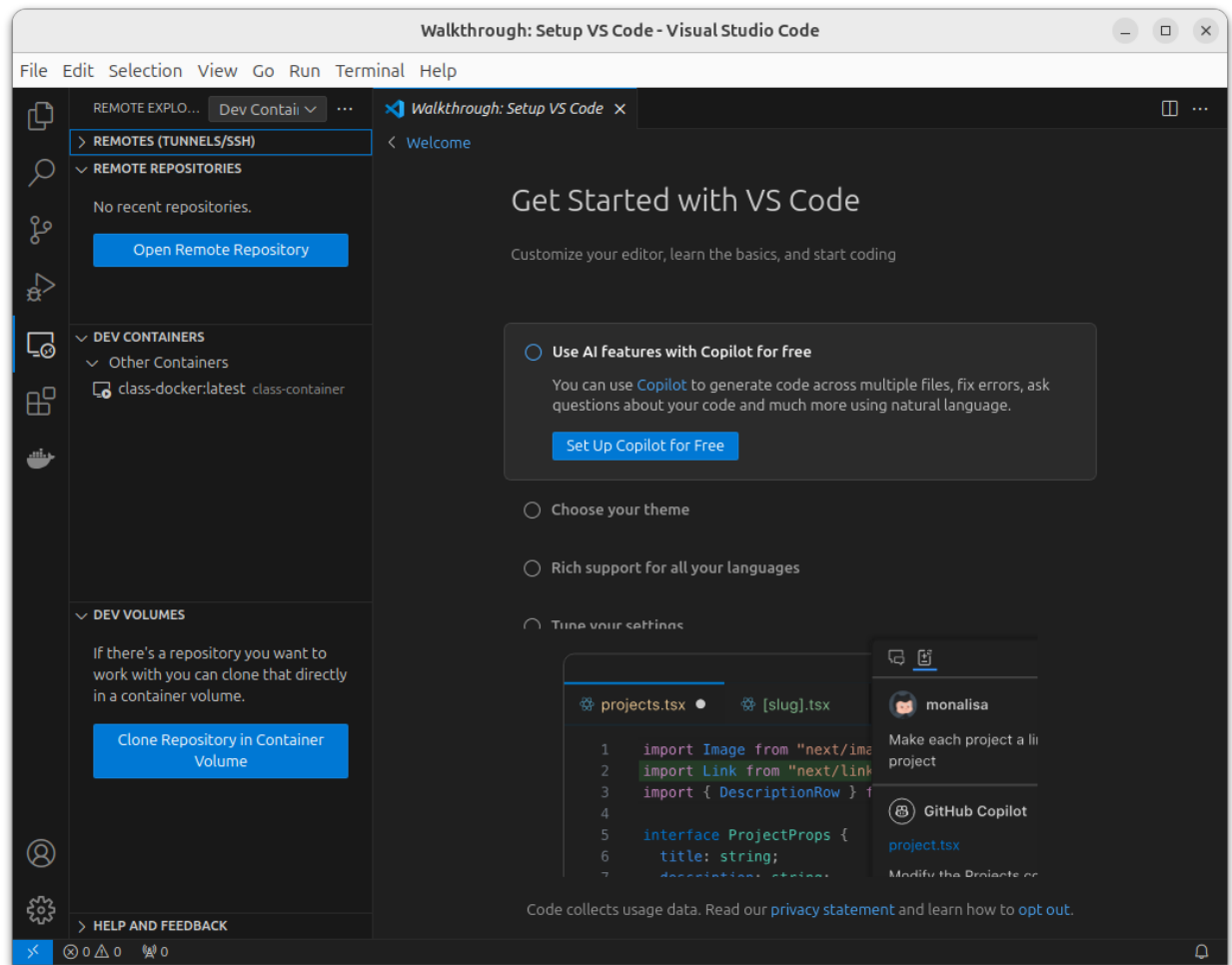
---

---
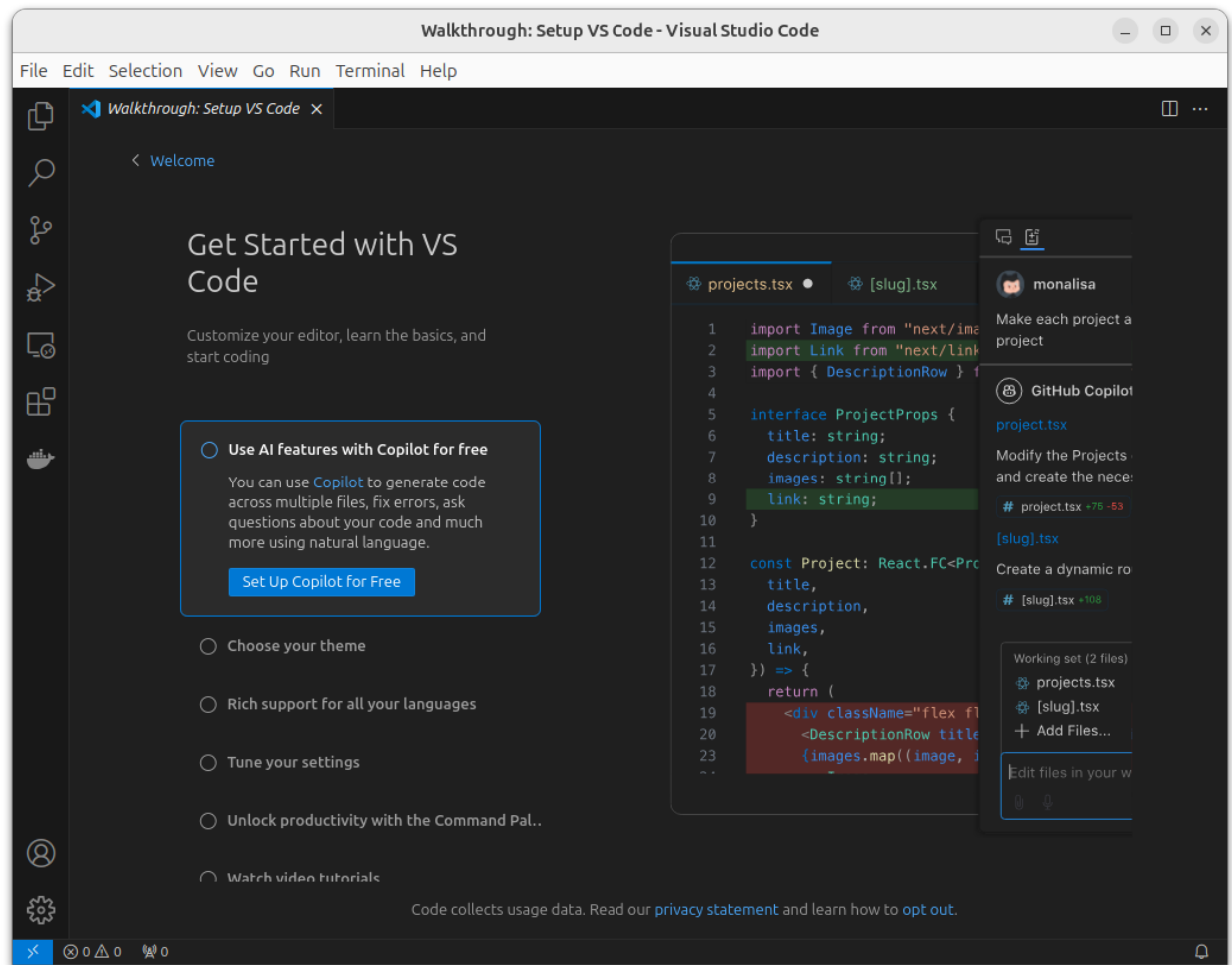
## Connect using the Remote - Containers Extension

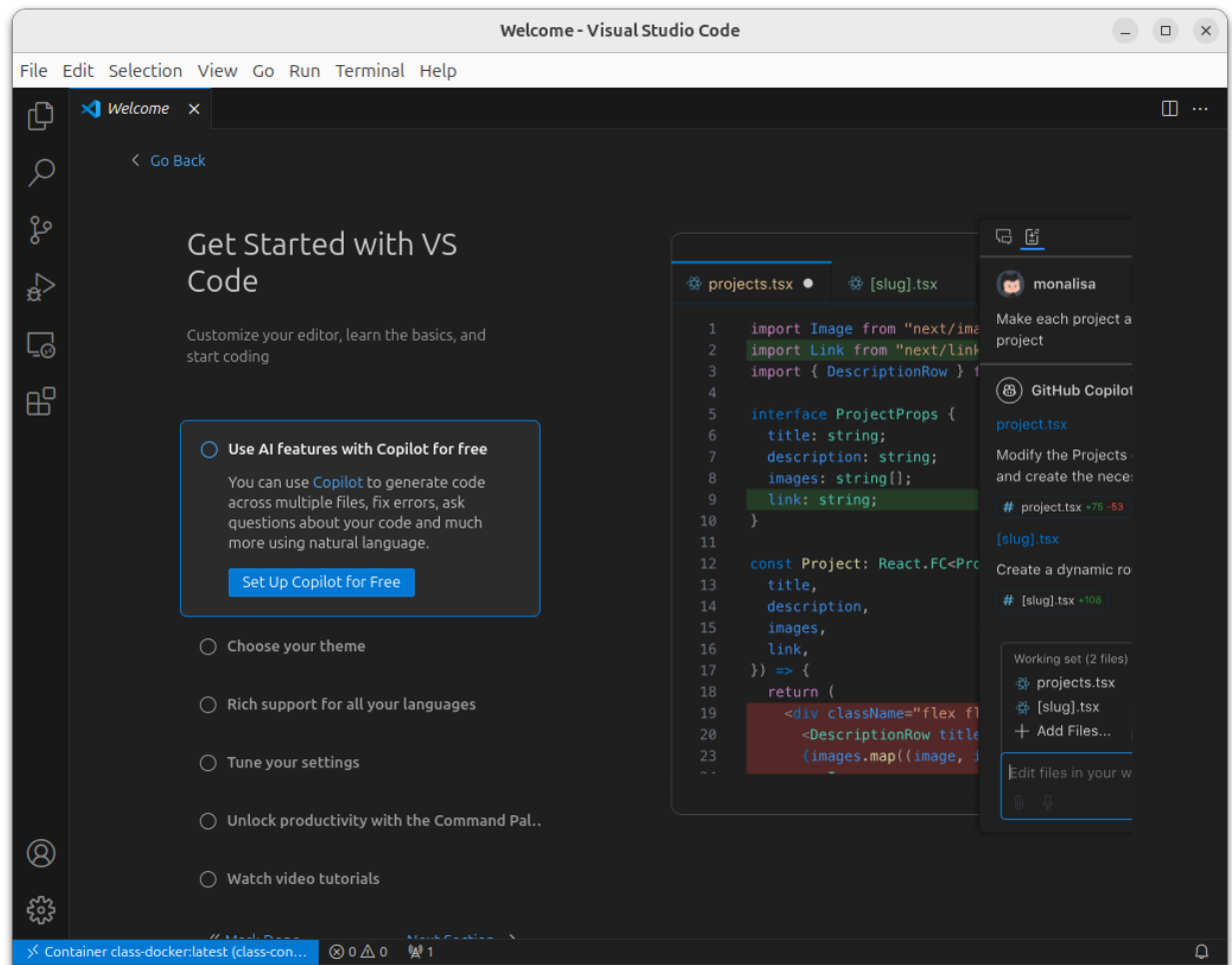You can use the "Remote - Containers" extension to connect directly to the running container:

1. **Attach to the container**:
   - Press `Ctrl+Shift+P` (or `Cmd+Shift+P` on Mac) to open the command palette.
   - Type `Remote-Containers: Attach to Running Container` and select it.
   - Choose `class-container` from the list.

---

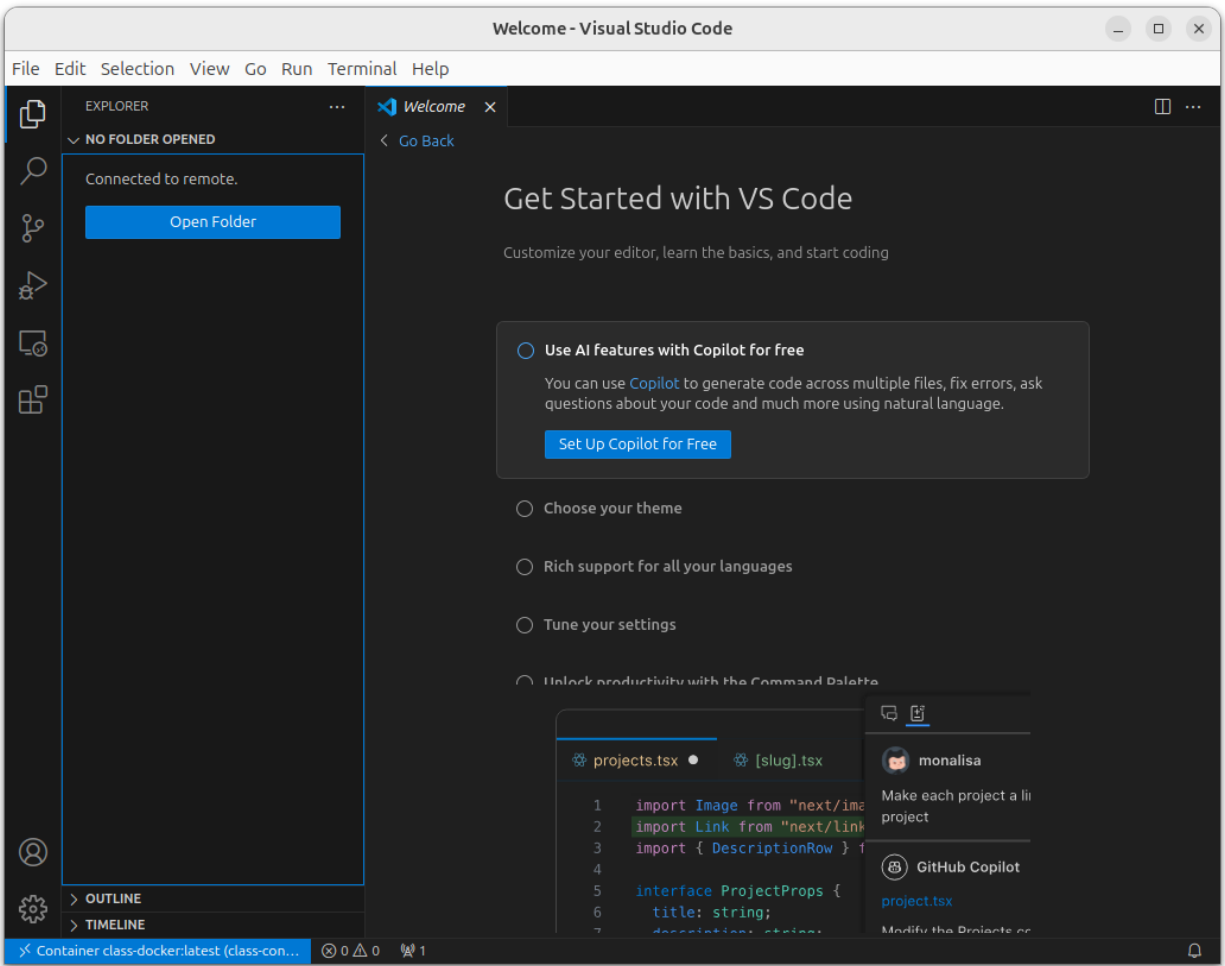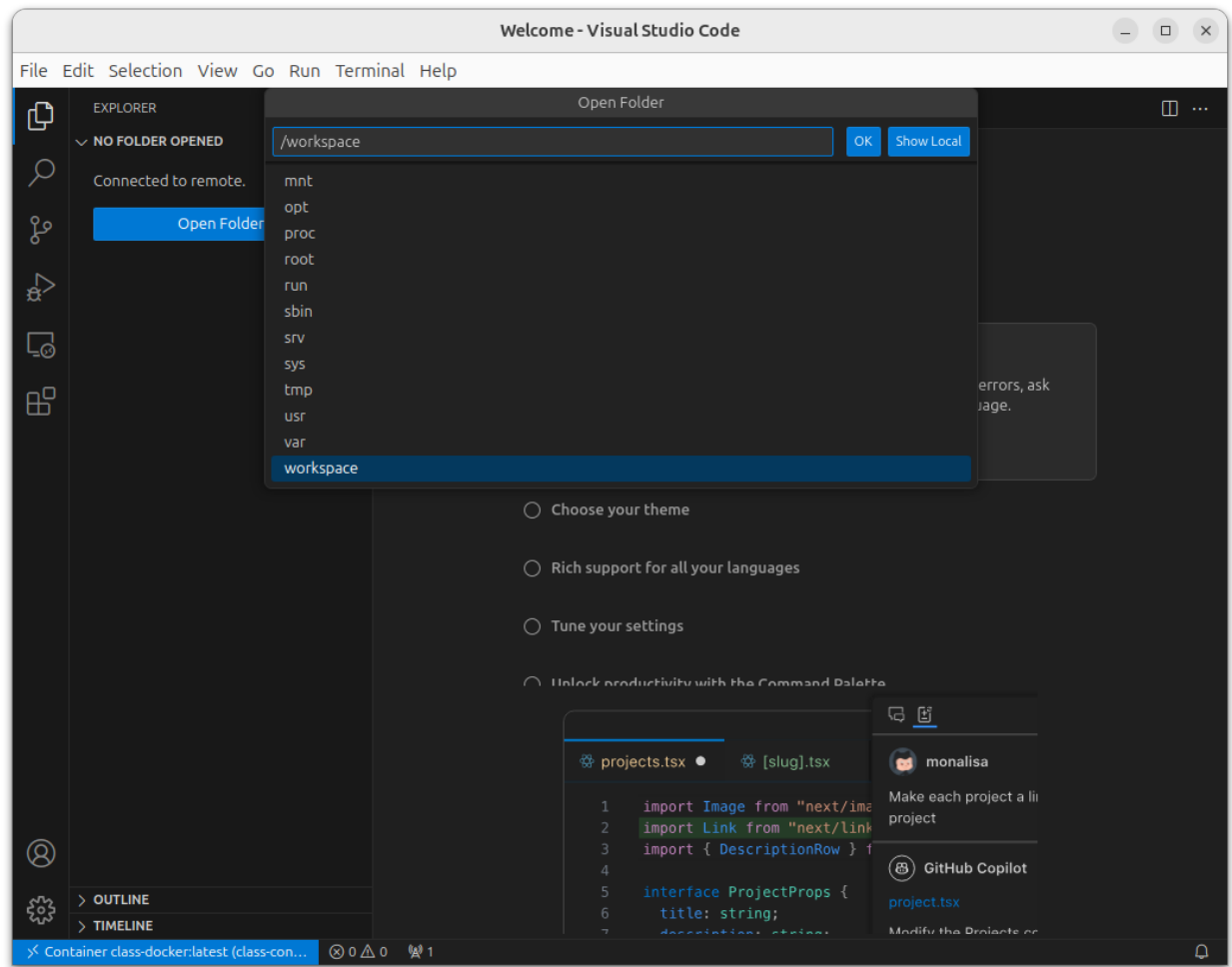A window will pop up with a different message in the bottom left.

---

# Connect using the Remote - Containers Extension

2. **Open the workspace**:
   - VSCode will open a new window where you can find the container's `/workspace` directory.
   - You can now edit, debug, and execute code directly inside the container.
   - You will have to install other extensions as needed, such as the Python one and the Jupyter one.

---

Welcome - Visual Studio Code

File   Edit   Selection   View   Go   Run   Terminal   Help

EXPLORER                                   ···        Welcome   ×

NO FOLDER OPENED

Connected to remote.

Open Folder

< Go Back

# Get Started with VS Code

Customize your editor, learn the basics, and start coding

○ **Use AI features with Copilot for free**

You can use Copilot to generate code across multiple files, fix errors, ask questions about your code and much more using natural language.

Set Up Copilot for Free

○ Choose your theme

○ Rich support for all your languages

○ Tune your settings

○ Unlock productivity with the Command Palette

projects.tsx ●        [slug].tsx

1   import Image from "next/ima
2   import Link from "next/link
3   import { DescriptionRow } f
4
5   interface ProjectProps {
6       title: string;
7       description: string;

monalisa
Make each project a li
project

GitHub Copilot
project.tsx
Modify the Projects co

OUTLINE
TIMELINE

Container class-docker:latest (class-con...        ⊗ 0  ⚠ 0        1

5

---

## Test your setup

1. **Create a Python file**:
   - Inside the container, create a file named `test.py`:

     ```python
     print("Hello from Docker!")
     ```
2. **Run the file**:
   - Use the integrated terminal in VSCode to run:

     ```
     python3 test.py
     ```
   - Verify that the output is `Hello from Docker!`.

---

## Troubleshooting

1. **No container found**:
   - Verify the container is running using `docker ps`.

2. **VSCode cannot attach to container**:

   - Check that the "Remote - Containers" extension is installed.
   - Ensure Docker Desktop is running.

3. **Python not found**:

   - Verify Python is installed in the container:

   ```
   python3 --version
   ```

---

# Summary

This setup allows you to use a full-featured development environment while keeping your code and dependencies isolated in a container.