

GitHub Copilot Training: AI-Powered Coding

Training: GitHub Copilot for Developers

Module 1 – Introduction to GitHub Copilot

- What Is GitHub Copilot?
- How AI Helps Write Code
- Common Usage Examples
- Simple Demo: Writing a Small Function
- Exercise: Letting Copilot Suggest a Solution

Module 2 – Installation and Configuration

- Installing Visual Studio Code
- Installing GitHub Copilot and Copilot Chat
- Signing In to a GitHub Account
- Enabling Suggestions
- Exploring the Interface and Useful Shortcuts
- Exercise: Practicing How to Accept and Reject Suggestions

Module 3 – Generating Code with Copilot

- Basic Code Completion
- Generating a Function from a Comment
- Improving a Small Piece of Code
- Creating a Component or Small Function in the Programming Language Used by the Group
- Translating Code from One Programming Language to Another
- Exercise: Generating a Small Script from a Simple Request
- Exercise: Improving an Overly Long Function

Module 4 – Using Copilot Chat

- Exploring the Chat Window
- Asking Copilot to Explain Code
- Asking Copilot to Fix a Small Bug
- Generating Comments or a Short README
- Exercise: Asking Copilot to Explain a Small File
- Exercise: Requesting a Specific Improvement

Module 5 – Writing Effective Prompts

- How to Ask an Effective Question
- Providing Basic Context

- Requesting a Specific Style or Structure
- Examples of Effective Prompts
- Exercise: Generating a Function with a Well-Written Prompt
- Exercise: Requesting a Simpler Version of Existing Code

Module 6 – GitHub Copilot Best Practices

- Always Reviewing Generated Code
- Avoiding Full Reliance on AI
- Keeping Sensitive Information Out of Prompts
- Understanding the Limitations: Copilot Can Sometimes Be Wrong
- Exercise: Reviewing a Copilot Suggestion and Correcting It When Necessary