

Accelerate app development by using GitHub Copilot (AZ-2007)

Description

Accelerate Your Development with GitHub Copilot

Application development is evolving rapidly, and AI-powered tools are revolutionizing the way we work. With GitHub Copilot and GitHub Copilot Chat, boost your productivity by integrating intelligent code suggestions directly into Visual Studio Code.

This training course, “Accelerating Application Development with GitHub Copilot (AZ-2007),” enables you to fully leverage GitHub Copilot to speed up development, improve your code, and optimize documentation. Whether you’re an experienced developer or looking to enhance your skills, this course provides a comprehensive immersion into AI-assisted coding.

A Complete and Practical AZ-2007 Training

Through progressive modules and hands-on exercises, you will learn to harness GitHub Copilot's advanced capabilities. Discover how to generate code more efficiently, document your projects, and automate application testing.

Niveau

Intermédiaire

Course Content

Module 1: Get started with GitHub Copilot

- Examine AI tools from GitHub, OpenAI, and Microsoft
- Examine GitHub Copilot tools, benefits, and limitations
- Install GitHub Copilot extensions for Visual Studio Code
- Examine the autocomplete features of the GitHub Copilot extension
- Examine the AI assistance features of the GitHub Copilot Chat extension
- Configure GitHub Copilot extensions for Visual Studio Code

Module 2: Generate documentation using GitHub Copilot tools

- Examine the "document" and "explain" features of GitHub Copilot Chat
- Generate code explanations using GitHub Copilot Chat
- Generate project documentation using GitHub Copilot Chat
- Generate inline code documentation using GitHub Copilot Chat
- Complete the "code documentation" challenge
- Review the "code documentation" solution

Module 3: Develop code features using GitHub Copilot tools

- Examine the code development features of GitHub Copilot
- Examine GitHub Copilot best practices
- Create code using code line completions
- Create code using GitHub Copilot Inline Chat

- Complete the create new code challenge
- Review the create new code solution
- Complete the code logic challenge
- Review the code logic solution
- Convert code from one programming language to another

Module 4: Develop unit tests using GitHub Copilot tools

- Examine the unit testing tools and environment
- Create unit tests using GitHub Copilot Chat
- Create unit tests for specific conditions using GitHub Copilot
- Complete the "create unit tests" challenge
- Review the "create unit tests" solution

Module 5: Implement code improvements using GitHub Copilot tools

- Examine GitHub Copilot support for code improvements
- Improve code quality using GitHub Copilot Chat
- Improve code reliability and performance using GitHub Copilot Chat
- Improve code security using GitHub Copilot Chat
- Complete the "app improvement" challenge
- Review the "app improvement" solution

Module 6: Guided project - Accelerate app development using GitHub Copilot tools

- Prepare the development environment
- Analyze and document code using GitHub Copilot tools
- Develop code features using GitHub Copilot tools
- Develop unit tests using GitHub Copilot tools
- Refactor and improve code sections using GitHub Copilot tools

Lab / Exercises

- This course provides you with exclusive access to the official Microsoft lab, enabling you to practice your skills in a professional environment.

Documentation

- Access to Microsoft Learn, Microsoft's online learning platform, offering interactive resources and educational content to deepen your knowledge and develop your technical skills.

Participant profiles

- Software Developers
- Development Engineers
- Software Architects
- Technical Project Managers
- Computer Science Students

Prerequisites

- An active GitHub Copilot subscription
- Experience in application development
- Proficiency in C# development with Visual Studio Code

Objectives

- Understand the advanced features of GitHub Copilot
- Master development assistance with GitHub Copilot Chat
- Generate and document code automatically
- Develop optimized features using AI suggestions
- Create and run unit tests with GitHub Copilot
- Improve code quality, reliability, and security
- Optimize end-to-end application development

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Classroom Registration Price (CHF)

900

Virtual Classroom Registration Price (CHF)

850

Duration (in Days)

1

Reference

AZ-2007