GitHub Foundations (GH-900)

Description

Understanding the basics of GitHub for better collaboration

GitHub has become an essential tool for all modern development teams. With the *GitHub Fundamentals (GH-900)* training course, you will discover the core features of the platform to work efficiently as a team. This course guides you step-by-step through mastering GitHub's fundamental concepts. You will learn to manage your repositories, branches, and contributions with discipline and method.

Through targeted modules and hands-on exercises, you will get familiar with GitHub's key features. You will learn how to structure your projects, collaborate on code, track changes, and maintain smooth communication within your team. Each concept is explained clearly to help you progress quickly and use GitHub with confidence.

A program designed for rapid skills development

This training is intended for anyone who wants to master GitHub in a professional and sustainable way. You will learn not only how to use GitHub for your personal projects but also how to collaborate effectively in more complex environments. You will explore GitHub Copilot, GitHub Codespaces, and best practices for security and administration. By following this path, you will be able to integrate GitHub into your daily workflows while meeting the quality standards of collaborative development.

Course Content
Module 1: Introduction to Git

- What is version control?
- Basic Git commands

Module 2: Introduction to GitHub

- What is GitHub?
- Components of the GitHub flow
- GitHub as a collaborative platform
- Managing the GitHub platform

Module 3: Introduction to GitHub Products

- GitHub accounts and plans
- GitHub Mobile and GitHub Desktop
- GitHub billing

Module 4: Setting up Code Scanning on GitHub

- What is code scanning?
- Enable code scanning with third-party tools
- Configure code scanning

Module 5: Introduction to GitHub Copilot

- GitHub Copilot, your AI-powered pair programmer
- Interacting with Copilot
- Installing, configuring, and troubleshooting GitHub Copilot

Module 6: Coding with GitHub Codespaces

- The codespaces lifecycle
- Customizing your codespace
- Codespaces and the GitHub.dev editor

Module 7: Managing Your Work with GitHub Projects

- Projects and classic Projects
- How to create a project
- How to organize your project
- How to organize and automate your project
- Insights and automation with Projects

Module 8: Communicating Effectively on GitHub with Markdown

- What is Markdown?

Module 9: Contributing to an Open Source Project on GitHub

- Finding where you can help
- Contributing to an open-source repository

Module 10: Managing an InnerSource Program with GitHub

- How to manage a successful InnerSource program

Module 11: Managing a Secure Repository Using GitHub Best Practices

- How to manage a secure GitHub repository
- Automated security

Module 12: Introduction to GitHub Administration

- What is GitHub administration?
- How GitHub authentication works
- How GitHub organization and permissions work

Module 13: Authenticating and Authorizing User Identities on GitHub

- Managing user identities and access
- User authentication
- User authorization
- Team synchronization

Module 14: Managing Repository Changes Using Pull Requests on GitHub

- What are pull requests?

Module 15: Searching Repository History and Organizing It with GitHub

- How to search repository history and organize it with GitHub

Module 16: Using GitHub Copilot with Python

- What is GitHub Copilot?
- Using GitHub Copilot with Python

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

- Web and software developers
- System and network administrators
- IT project managers
- Computer science students
- Open-source contributors
- Beginners looking to master GitHub

Prerequisites

- Have a basic understanding of computer concepts
- Understand the fundamental principles of programming
- Be familiar with using web and software tools

Objectives

- Understand version control concepts with Git
- Use GitHub's essential features
- Efficiently manage repositories, branches, and commits
- Set up and leverage code scanning on GitHub
- Collaborate using GitHub Copilot and Codespaces
- Create and organize projects with GitHub Projects
- Communicate clearly with Markdown on GitHub
- Apply security best practices on GitHub

Description
GitHub Foundations (GH-900)
Niveau
Fondamental
Classroom Registration Price (CHF)
900
Virtual Classroom Registration Price (CHF)
850
Duration (in Days)
1
Reference

GH-900