

Python Programming with GitHub Copilot

Duration: 08 hours

Module 1: Introduction to Tools and Python Setup

- Installing GitHub Copilot on Python IDEs - Step-by-step installation guide for environments like PyCharm or VS Code.
- Exploring GitHub Copilot with Python - Overview of features tailored for Python development.
- Hands-On Practice: Python Basics with Copilot - Interactive coding sessions.

Module 2: Advanced Python Coding and AI Integration

- Advanced Python Code Generation - Using GitHub Copilot powered by GPT-3.5 Turbo for complex scripts.
- Troubleshooting Python Code with AI - Techniques for identifying and correcting errors.
- Optimizing Python Code and Documentation - Enhancing performance and automating documentation.

Module 3: Python-Specific Testing and Database Management

- Python Unit Testing and Code Reviews - Generating tests and reviewing code with AI enhancements.
- Python Database Interaction and Customization - Managing databases and customizing libraries with AI.
- Telemetry and Advanced Python Analytics - Implementing telemetry and leveraging analytics.