

What you'll learn:

- Understand how to leverage GitHub Actions for continuous integration and continuous deployment (CI/CD).
- Automate issue creation and assignments in GitHub Projects.
- Leverage discussion information into actionable feedback.
- Seamlessly shift left using repository protection and vulnerability remediation tools built into GitHub.
- Learn how to use GitHub Copilot, an AI tool for software development.

GitHub has long been the premier site for open-source projects and is now turning a pivotal corner into becoming the predominant platform for all aspects of the development lifecycle such as protecting company code through various GitHub Products or curating marketplace actions and workflows prior to use.

Whether you are new or experienced with GitHub, this learning opportunity is essential for anyone who wants to enhance their Agile and DevOps process with the capabilities of GitHub.

This course will look at how to leverage GitHub Actions (CI/CD), automate issue creation and assignments in GitHub Projects, leverage discussion information into actionable feedback, and seamlessly shift left using repository protection and vulnerability remediation tools built into GitHub!

Finally, what software training would be complete without some AI!? GitHub Copilot presents a new approach to software development.

## Who Should Attend

Anyone currently using GitHub (Basic to Advanced) or looking to adopt GitHub in their software development lifecycle.

## Course Outline

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### Understanding the various tools and features of GitHub

#### Automating issue creation and assignments in GitHub Projects

- Overview
- Project views
- Project automation

#### Introduction to GitHub Administration

- Overview
- Account types
- Licenses
- Permissions and access
- Rulesets and branch protections
- Roles and custom roles

#### Leveraging discussion information into actionable feedback

- Wiki overview
- Discussions overview

### Leveraging GitHub Actions for CI/CD

- Basic syntax of actions
- Issue templates and issue ops
- Basic vs composite actions
- Third-party tooling and webhooks

### Seamlessly shifting left using repository protection and vulnerability remediation tools built into GitHub

- GHAS overview
- Dependabot overview and advance use
- Secret scanning overview and advance use
- Code scanning overview and advance use
- Third-party tooling

### Using GitHub CoPilot for software development

- Introduction to Copilot
- Base use and simple examples
- Leveraging Copilot in a work environment

### Review and Q&A session

- Best practices and applicable usage of both