GitHub Advanced Security in a Day

Duration: 16 hours

Not mandatory but Good to Have Knowledge of GitHub and Azure DevOps

Module-0: Revisiting Github Basics

- What is Github
- Creating a Github Account
- Github Repo

Module-1: Introduction to GitHub Advanced Security (GHAS)

- What is GitHub Advanced Security?
- Enable GitHub Advanced Security
- Manage access to GitHub Advanced Security
- Manage the GitHub Advanced Security features and alerts

Module-2: Configure Dependabot security updates on your GitHub repo

- Manage your dependencies on GitHub
- Dependabot alerts
- Dependabot security updates
- Manage Dependabot notifications and reports
- Dependency review
- Exercise Configure Dependabot security updates

Module-3: Configure and use secret scanning in your GitHub repository

- What is secret scanning?
- Configure secret scanning
- Use secret scanning
- Exercise

Module-4: Configure code scanning on GitHub

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

Module-5: Identify security vulnerabilities in your codebase by using CodeQL

- Prepare a database for CodeQL
- Run CodeQL in a database
- Understand CodeQL results
- Troubleshoot CodeQL results

Module-6: Code scanning with GitHub CodeQL

- What is CodeQL?
- How does CodeQL analyze code?
- What is QL?
- Code scanning and CodeQL
- Customize your code scanning workflow with CodeQL Part 1

- Exercise Reference a CodeQL query
- Customize your code scanning workflow with CodeQL Part 2
- Use the CodeQL CLI
- Customize languages and builds for code scanning
- Exercise Configure a CodeQL language matrix

Module-7: Manage sensitive data and security policies within GitHub

- Setting security policies
- Create and manage repository rulesets
- Reporting and logging
- Exercise

Module-8: Configure GitHub Advanced Security for Azure DevOps

- Azure DevOps Overview
- Azure Repo Overview
- Azure Pipeline Overview

Module-9: Setup GHAS Scanning in Azure Devops

- Set up secret scanning
- Set up dependency scanning
- Set up code scanning