

# AZ-2006: Automate Azure Load Testing by using GitHub Actions

**Duration: 8 hours**

Learn how to implement GitHub Actions and configure Azure Load Testing to automate testing app deployments.

## Prerequisites

- Experience with GitHub and an understanding of pull requests, code merges, and other repository management practices.
- Experience creating resources in Azure.

## Module 1: Implement GitHub Actions

GitHub Actions is a powerful CI/CD platform that allows developers to automate their software development workflows. Learn how GitHub actions are implemented, how workflow files are structured, and how to control workflow execution.

- Introduction
- Explore GitHub Actions
- Examine a workflow file
- Implement variables and scripts in a workflow
- Explore contexts and expressions in GitHub
- Manage secrets in GitHub
- Exercise - Create a workflow that validates code on a pull request

## Module 2: Implement GitHub Actions for Azure

Learn how to use GitHub Actions for Azure in your workflows and configure Azure with the necessary security principals to automate software development workflows between GitHub and Azure.

- Introduction
- Explore GitHub Actions for Azure
- Discover authentication options for GitHub Actions for Azure
- Exercise - Use GitHub Actions for Azure to publish a web app to Azure App Service

## Module 3: Implement Azure Load Testing

Learn how to optimize application performance by simulating real-world loads with Azure Load Testing service. Learn how to automate load testing with GitHub Actions to ensure consistent application performance and scalability.

- Introduction
- Explore Azure Load Testing
- Create and manage tests in Azure Load Testing
- Create a load test YAML configuration file
- Define fail criteria and AutoStop
- Configure secrets and environment variables
- Exercise - Automate Azure load testing using GitHub Actions