

QA

INTERMEDIATE

4 DAYS

API Automation Testing with Postman and Newman

Build a strong foundation in Infrastructure as Code using Terraform with AWS to provision and manage cloud infrastructure efficiently. Learn Terraform fundamentals, AWS integrations, and best practices to optimize scalability, reliability, and infrastructure costs.

Why Postman & Newman?

Infrastructure as Code

With Terraform, you can define your infrastructure as code, this enables teams to automate infrastructure deployment and management, which can save time and reduce errors.

Cost-Effective

Terraform can help businesses identify and eliminate unnecessary resources, which can lead to significant cost savings.

Agility and Scalability

Terraform allows for infrastructure changes to be made quickly and easily, allowing businesses to respond to changing needs and demands.

What you'll be able to do

- ✓ Gain a solid understanding of the basics of Terraform, including its key features, concepts, and syntax.
- ✓ Learn how to use Terraform with AWS to manage infrastructure in a cloud environment.
- ✓ Gain a good understanding of AWS services and how they can be used with Terraform.
- ✓ Learn the best practices for using Terraform with AWS.
- ✓ Learn how to optimize infrastructure efficiency using Terraform and AWS.

Who this is for

- Software Developers and Testers
- QA Engineers
- IT Professionals
- Project Managers
- Business Analysts

Curriculum

01 Introduction to API Automation Testing

- Overview of API testing, Importance of API testing, API testing methodologies, API testing tools.
- Hands-on practice for introduction to api automation testing
- Validate results and handle common failures
- Capture reusable patterns for the framework

02 Installing and Setting up Postman and Newman

- Downloading and installing Postman, Setting up Postman environment, Downloading and installing Newman, Setting up Newman environment.
- Hands-on practice for installing and setting up postman and newman
- Validate results and handle common failures
- Capture reusable patterns for the framework

03 Creating API Requests using Postman

- Creating a new API request in Postman, Configuring API request parameters, Setting up request headers, and Making GET, POST, PUT, and DELETE requests.
- Hands-on practice for creating api requests using postman
- Validate results and handle common failures
- Capture reusable patterns for the framework

04 Writing Test Scripts using the Postman Testing Sandbox

- Understanding the Postman Testing Sandbox, Writing test scripts in Postman, Verifying API responses using test scripts, and Storing test results and test data.
- Hands-on practice for writing test scripts using the postman testing sandbox
- Validate results and handle common failures
- Capture reusable patterns for the framework

05 Running API Tests using Newman

- Running Postman collections using Newman, Automating API tests using Newman, and Generating test reports using Newman.
- Hands-on practice for running api tests using newman
- Validate results and handle common failures
- Capture reusable patterns for the framework

06 Integrating API Tests into the CI/CD Pipeline

- Overview of CI/CD pipeline, Integrating Postman and Newman into CI/CD pipeline, Setting up Postman and Newman in Jenkins, Automating API tests as part of the CI/CD pipeline.
- Hands-on practice for integrating api tests into the ci/cd pipeline
- Validate results and handle common failures
- Capture reusable patterns for the framework

07 Debugging and Troubleshooting API Tests

- Debugging API tests using Postman and Newman, Troubleshooting API test issues, and Resolving common API test issues.
- Hands-on practice for debugging and troubleshooting api tests
- Validate results and handle common failures
- Capture reusable patterns for the framework

08 Collaborating on API Testing with Postman and Newman

- Sharing Postman collections with team members, Collaborating on API tests using Postman and Newman, and Managing API tests as a team.
- Hands-on practice for collaborating on api testing with postman and newman
- Validate results and handle common failures
- Capture reusable patterns for the framework

09 Sharing Postman Collections with Team Members

- Exporting Postman collections, Importing Postman collections, and Sharing Postman collections with team members.
- Hands-on practice for sharing postman collections with team members
- Validate results and handle common failures
- Capture reusable patterns for the framework

10 Best Practices for API Testing with Postman and Newman

- Designing effective API tests, Writing efficient test scripts, Debugging and troubleshooting API tests, and Managing API tests over time.
- Hands-on practice for best practices for api testing with postman and newman
- Validate results and handle common failures
- Capture reusable patterns for the framework

11 Advanced Features of Postman and Newman for API Testing

- Working with the environment and global variables, Using Postman pre-request and test scripts, Generating test data using Postman and Newman, and Integrating Postman and Newman with other testing tools.
- Hands-on practice for advanced features of postman and newman for api testing
- Validate results and handle common failures
- Capture reusable patterns for the framework