Postman in ERP APIs Testing Training Course

Professional Development Training Course Outline

Category	Enterprise Resource Planning (ERP)	**Duration**	10 Days
Base Fee	$3,000 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Postman in ERP APIs Testing Training Course is designed to equip professionals with the knowledge and practical skills necessary to efficiently test and automate ERP (Enterprise Resource Planning) APIs using Postman. As ERP systems become the backbone of many organizations, it’s crucial to ensure that their APIs are functional, secure, and high-performing. This course is ideal for QA engineers, testers, and developers who want to master the testing of ERP APIs using Postman and integrate API testing practices into their Agile and DevOps workflows. By leveraging Postman’s powerful features, participants will learn how to test RESTful and SOAP-based APIs, automate their testing processes, and ensure robust integration between ERP systems and other software solutions.

In today’s digital transformation era, API testing has emerged as a critical aspect of software development. With ERP systems being increasingly cloud-based, scalable, and distributed, the need for rigorous API testing is more important than ever. This training will provide hands-on experience with Postman for performing functional testing, performance testing, security checks, and regression testing for APIs. Participants will also explore best practices in creating reusable test scripts, validating responses, and handling authentication and authorization mechanisms in APIs. By the end of the course, attendees will have a deep understanding of the full API testing lifecycle in the ERP domain, empowering them to efficiently support their organization's ERP integration projects.

Programme Curriculum

Postman in ERP APIs Testing Training Course

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Course Duration

10 days

Course Objectives

1. Gain proficiency in using Postman for testing ERP APIs.
2. Learn to execute both functional and non-functional tests on ERP APIs.
3. Master the creation and management of test suites for API testing.
4. Automate the API testing process and integrate it with CI/CD pipelines.
5. Understand the role of Postman Collections and Environments in API testing.
6. Gain insights into API security testing, including authentication and authorization protocols.
7. Test ERP API performance by simulating load conditions with Postman.
8. Validate API responses with proper assertion techniques.
9. Perform API versioning and backward compatibility tests in ERP systems.
10. Ensure data integrity while testing API interactions with ERP databases.
11. Troubleshoot and resolve API errors using Postman Console and logs.
12. Integrate Postman with other tools like Jenkins for seamless testing automation.
13. Explore Postman Monitors for continuous API health monitoring.

Target Audience

1. QA Engineers.
2. Software Testers.
3. Developers.
4. Automation Engineers.
5. DevOps Professionals.
6. Project Managers.
7. System Integrators.
8. Technical Consultants.

Course Modules

Module 1: Introduction to Postman

- Overview of Postman and its features.
- Installing and setting up Postman for API testing.
- Understanding Postman Collections and Environments.
- Case Study: Creating and organizing tests within Collections.
- Running tests using Postman and analyzing the results.

Module 2: ERP APIs Overview

- Introduction to ERP systems and their API architecture.
- REST and SOAP APIs in ERP systems.
- Key concepts of ERP API testing.
- Case Study: Common challenges in ERP API testing.
- Best practices for effective ERP API testing.

Module 3: Functional Testing with Postman

- Writing test scripts in Postman.
- Testing RESTful and SOAP APIs.
- Working with request methods.
- Validating API responses and status codes.
- Case Study: Handling dynamic data in requests.

Module 4: Authentication and Authorization in APIs

- Overview of authentication methods in APIs
- Implementing authorization in ERP APIs.
- Handling secure data in requests.
- Using Postman for OAuth 2.0 testing.
- Case Study: Testing OAuth 2.0 integration with ERP APIs.

Module 5: Data Validation in ERP API Testing

- Validating response data using Postman assertions.
- Handling JSON and XML responses.
- Validating API response structure.
- Working with query parameters and URL encoding.
- Case Study: Validating data integrity in an ERP API response.

Module 6: Performance Testing with Postman

- Simulating load and stress tests using Postman.
- Monitoring API response time and throughput.
- Analyzing performance bottlenecks in ERP APIs.
- Integrating Postman with external load testing tools.
- Case Study: Performance testing of a cloud-based ERP API.

Module 7: Error Handling and Troubleshooting

- Common errors in ERP API testing.
- Using Postman Console to debug requests.
- Troubleshooting authentication errors and incorrect responses.
- Effective error logging in API tests.

- Case Study: Debugging a failed ERP API request.

Module 8: Postman Automation and CI/CD Integration

- Automating tests with Postman scripts.
- Running automated tests using **Newman**.
- Integrating Postman with Jenkins for continuous testing.
- Version control for Postman collections.
- Case Study: Continuous testing of ERP APIs in a CI/CD pipeline.

Module 9: API Security Testing

- Introduction to API security vulnerabilities.
- Testing for **SQL Injection** and **XSS** in ERP APIs.
- Using Postman to test for data leaks and insecure endpoints.
- Implementing security headers in ERP APIs.
- Case Study: Testing ERP API security for sensitive data handling.

Module 10: Advanced Testing with Postman

- Using advanced scripts for dynamic data testing.
- Handling multi-step workflows in API tests.
- Postman Monitor setup for automated health checks.
- Working with **Mock Servers** for simulating ERP API responses.
- Case Study: Advanced error handling in ERP API automation.

Module 11: API Versioning and Compatibility Testing

- Understanding API versioning in ERP systems.
- Backward compatibility tests for ERP APIs.
- Handling deprecated API versions and migrations.
- Testing different API versions simultaneously.
- Case Study: Ensuring backward compatibility in ERP system upgrades.

Module 12: Regression Testing for ERP APIs

- What is regression testing and why it matters in ERP?
- Automating regression tests using Postman.
- Re-running tests after updates and changes.
- Versioning and managing test cases for regression.
- Case Study: Postman for automating ERP system upgrades.

Module 13: Postman Reporting and Analysis

- Generating reports from Postman test results.
- Integrating Postman reports with external tools.
- Analyzing test results for actionable insights.
- Sharing reports with team members and stakeholders.
- Case Study: Reporting API test results for senior management.

Module 14: Best Practices in ERP API Testing

- Setting up an optimal API testing strategy.

- Test environment setup and configuration.
- Collaborating with developers and other teams for successful testing.
- Tracking and reporting issues in ERP API testing.
- Case Study: Best practices followed in a global ERP API project.

Module 15: Final Project and Certification

- Practical project for testing an ERP API.
- Applying the techniques learned throughout the course.
- Receiving feedback from instructors.
- Certification of completion for successful participants.
- Case Study: Real-world ERP system API testing scenario.

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call +254769199797

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	04 Dec 2026	Online	$2,000
23 Nov 2026	04 Dec 2026	Physical	$3,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$9,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$12,000

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