**🎙️ YouTube Voiceover Script: API Testing Tutorial**

**✅ Slide 1: Cover Slide**

"Welcome to *Milan’s QA World*! In this tutorial, we’ll dive deep into API testing—from fundamentals to advanced techniques. Whether you're a beginner or brushing up your skills, this guide has something for everyone."

**✅ Slide 2: What is API Testing?**

"API testing validates the communication between software systems. It ensures data flows correctly, securely, and efficiently—without relying on a UI. In real-world scenarios, APIs power everything from mobile apps to banking systems." 🔗 Part 1: Introduction to API Testing | What is API? | #postman explains this beautifully with examples.

**✅ Slide 3: Functional vs Non-Functional**

"Let’s compare two key categories: Functional testing checks if the API behaves as expected—like returning correct data. Non-functional testing focuses on performance, security, and reliability. Here's a quick table to break it down."

**✅ Slide 4: Key Concepts**

"Before we test, we need to understand:

* **Endpoints**: URLs that expose API functionality
* **Methods**: GET, POST, PUT, DELETE
* **Payloads**: Data sent with requests
* **Headers**: Metadata like content type and authorization"

**✅ Slide 5: Tools Overview**

"Popular tools include:

* **Postman** for manual and automated testing
* **SoapUI** for SOAP services
* **REST Assured** for Java-based automation" 🔗 Intro to QA Automation (With Real Examples + AI in Testing ...) covers tool selection and real-world use cases.

**✅ Slide 6: Postman Demo**

"Let’s run a simple GET request in Postman. We’ll use the Reqres API to fetch user data and validate the response." 🔗 API Testing with POSTMAN NEW UI Demo walks through the interface and request setup.

**✅ Slide 7: REST Assured Demo**

"Now let’s automate the same test using REST Assured in Java. We’ll write a test to validate the status code and response body." 🔗 REST Assured API Testing Tutorial Crash Course 2024 shows how to build and run these tests step-by-step.

**✅ Slide 8: Common Test Cases**

"Typical API test cases include:

* CRUD operations
* Authentication flows
* Pagination and filtering These help ensure your API handles real-world scenarios."

**✅ Slide 9: Advanced Techniques**

"Level up with:

* **Parameterization** for data-driven testing
* **Mocking** to simulate unavailable endpoints
* **CI/CD integration** for automated test runs" 🔗 Master API Testing: From Basics to Advanced Automation covers these techniques in depth.

**✅ Slide 10: Error Codes**

"Understanding HTTP error codes is crucial.

* 200: OK
* 400: Bad Request
* 401: Unauthorized
* 500: Internal Server Error These codes help diagnose issues quickly."

**✅ Slide 11: Interview Prep**

"For interviews, focus on:

* API testing concepts
* Tools like Postman and REST Assured
* Sample questions like: 'How do you validate a response?' or 'What’s the difference between PUT and PATCH?'"

**✅ Slide 12: Final Checklist**

"Before wrapping up, here’s your QA checklist: ✅ Validate endpoints and methods ✅ Use assertions for response data ✅ Automate with CI/CD ✅ Generate HTML reports ✅ Follow clean coding practices" 🔗 Clean Coding Practices for Test Automation ‍| Programmers ... is a must-watch for writing maintainable test code.

**✅ Slide 13: Outro**

"Thanks for watching! If you found this tutorial helpful, Like, Share, and Subscribe to *Milan’s QA World*. Check out the GitHub link in the description for sample projects and scripts. Keep learning, keep testing!"