API TEST PLAN – JSONPlaceholder

Project Name

Manual API Testing using JSONPlaceholder

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Tool Used

Postman (Desktop Version)

Base URL

https://jsonplaceholder.typicode.com

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1. Introduction

This test plan describes the approach for performing manual API testing on the JSONPlaceholder REST APIs. JSONPlaceholder is a free fake REST API used for testing and learning purposes. This document explains the scope, strategy, and deliverables involved in validating the API endpoints.

2. Objective

The objective of this API testing is to:

- Validate the **functional correctness** of REST API endpoints
- Verify HTTP methods such as **GET, POST, PUT, and DELETE**
- Validate **request structure, response body, headers, and status codes**
- Ensure APIs return expected responses for both valid and invalid inputs

3. Scope

In Scope

- Testing of /posts API resource
- HTTP methods:
    - GET – Fetch posts
    - POST – Create new post
    - PUT – Update existing post
    - DELETE – Delete post

- Validation of:
    - Response body (JSON format)
    - HTTP status codes
    - Response headers

Out of Scope

- Performance testing
- Security testing
- Load and stress testing
- Database validation (data persistence)

4. Test Environment

- **Testing Tool:** Postman (Desktop)
- **API Type:** REST API
- **Authentication:** Not required
- **Operating System:** Windows / macOS
- **Network:** Stable internet connection

5. Test Approach

Manual API testing will be conducted using **Postman**.
 Each API endpoint will be tested by:

- Sending valid and invalid requests
- Verifying HTTP status codes (200, 201, 404, etc.)
- Validating response body and structure
- Checking response headers
- Executing positive and negative test scenarios

6. Test Deliverables

The following documents will be produced during testing:

- API Test Plan
- API Test Scenarios
- API Test Cases
- Test Execution Report
- Bug Report (if applicable)
- Postman Collection
- Screenshots of API execution

7. Entry Criteria

Testing will begin when:

- JSONPlaceholder API is accessible
- Postman tool is installed
- Test scenarios and test cases are prepared

8. Exit Criteria

Testing will be completed when:

- All planned test cases are executed
- Execution results are documented
- All identified issues are reported
- Test summary documentation is completed

9. Risks & Assumptions

Risks

- JSONPlaceholder uses **mock data**, which is not saved permanently
- POST, PUT, and DELETE requests simulate success but do not persist data
- Limited real-world behavior due to fake API nature

Assumptions

- API behavior remains stable during testing
- Expected responses follow JSONPlaceholder documentation

10. Test Schedule

Activity	Timeline
Understanding API & Scenarios	Day 1
Test Case Creation	Day 2
Test Execution	Day 3–4
Bug Reporting	Day 5
Documentation & Review	Day 6–7