

JSONPlaceholder API – Manual API Testing Project

Project Overview

This project documents manual API testing performed using Postman against the JSONPlaceholder public API. The goal was to validate core API behavior, status codes, response structures, and error handling for common GET and POST operations.

Objectives

- Validate successful retrieval of resources using GET endpoints
- Validate creation behavior using POST endpoints
- Verify error handling for invalid endpoints and non-existent resources
- Confirm response structure and key fields returned in JSON responses

API Under Test

- Base URL: <https://jsonplaceholder.typicode.com>
- Endpoints tested:
 - `GET /posts`
 - `GET /posts/{id}`
 - `POST /posts`

Scope

In Scope

- Status code validation (200, 201, 404)
- Response body structure validation
- Positive and negative request scenarios

- Basic request body validation behavior (as supported by the API)

Out of Scope

- Authentication/authorization testing
- Data persistence verification (JSONPlaceholder is a mock API)
- Rate limiting / performance testing
- Security testing

Tools Used

- Postman
- Google Docs (documentation)
- GitHub (portfolio repository)

Test Environment

- Platform: Postman Desktop
- OS: Windows
- Network: Home connection
- Date tested: (optional)

Test Case ID	Title	Method + Endpoint	Request Data	Expected Result	Status
API-TC-001	Get all posts	GET /posts	N/A	200 OK + list of posts returned	PASS
API-TC-002	Invalid endpoint	GET /postss	N/A	404 Not Found + empty/error response	PASS
API-TC-003	Get single post	GET /posts/1	N/A	200 OK + single object with id=1	PASS
API-TC-004	Get non-existent post	GET /posts/999999	N/A	404 Not Found + empty/error response	PASS
API-TC-005	Create post (valid)	POST /posts	title/body/userId	201 Created + response contains id	PASS
API-TC-006	Create post missing title	POST /posts	body/userId	201 Created (mock API accepts request) + id returned	PASS
API-TC-007	Create post invalid types	POST /posts	Title number/body boolean/userId string	201 Created (mock API accepts request) + id returned	PASS

Test Summary

All test cases executed successfully. Positive and negative scenarios were performed for GET and POST operations. No functional defects were identified during this test cycle. Note: JSONPlaceholder is a mock API and does not enforce strict request validation or persist created data.

Execution Summary

- Total Test Cases: 7
- Executed: 7
- Passed: 7
- Failed: 0

- Blocked: 0

Coverage

- Positive API Tests: 3
- Negative API Tests: 2
- POST Validation Scenarios: 2
- Status Codes Validated: 200, 201, 404