**Test Plan: API GET Request Testing Using Apache JMeter**

**Project Name:** **Test Execution and Analysis**  
**Environment:** Pre-Production (Staging)  
**Prepared By:** Praveen Kumar Kushwaha  
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**1. Objective**

To validate the response of a GET API endpoint using Apache JMeter by:

* Sending GET requests to a public API.
* Applying various assertions (status code, response body content, response time, and size).
* Analyzing and interpreting test execution results.

**2. Tools and Requirements**

* **Tool:** Apache JMeter (5.4 or later)
* **API URL:** <https://jsonplaceholder.typicode.com/posts/1>
* **Internet:** Required for accessing the public API

**3. Test Environment**

* **Server Name:** jsonplaceholder.typicode.com
* **Path:** /posts/1
* **Method:** GET
* **Thread Group:** 1 user, 1 iteration

**4. Test Scenarios**

| **Scenario** | **Purpose** |
| --- | --- |
| Status Code Assertion | Ensure the server returns HTTP 200 OK |
| Response Body Assertion | Ensure the response body contains "userId" |
| Response Size Assertion | Ensure the response size is between 100 and 1000 bytes |
| Response Time Observation | Measure and observe server response time |

**5. Test Cases**

**Test Case 1: Status Code Validation**

* **Method:** GET
* **Expected Status:** 200
* **Assertion Type:** Response Code
* **Pass Criteria:** Response Code == 200

**Test Case 2: Content Validation**

* **Method:** GET
* **Assertion Field:** Response Body
* **Pattern:** "userId"
* **Pass Criteria:** Body contains "userId"

**Test Case 3: Size Validation**

* **Method:** GET
* **Assertion Field:** Response Size
* **Expected Range:** 100–1000 bytes
* **Pass Criteria:** Size within the specified range

**6. Execution and Analysis**

* Run test in JMeter.
* Analyze:
  + Sample count
  + Response time
  + Success/Failure of assertions

**7. Deliverables**

* **Screenshots:**
  + View Results Tree (Assertions tab)
  + Summary Report  
    <https://github.com/Praveen-kush/Jmeter>
* **Report Content:**
  + Brief explanation (3–5 sentences) covering:
    - What was tested
    - Which assertions passed/failed
    - Any issues found