**Lab Exercise 7– Custom Fault Handling for Quota Policy in Apigee**

**Objective:**

* Enforce quota using the **Quota policy**
* Use **FaultRule** and **AssignMessage** to show a **custom error message** when the quota is exceeded

**Step 1: Create a New API Proxy**

1. Go to **Apigee Console** → **Develop > API Proxies**
2. Click **+ CREATE PROXY**
3. Choose **Reverse Proxy**, then click **Next**
4. Fill in:
   * Proxy Name: quota-fault-demo
   * Base Path: /quota-fault-demo
   * Target URL: https://mocktarget.apigee.net
5. Click **Next** and then **Create**

**Step 2: Add Quota Policy**

1. Open the proxy and go to the **Develop** tab
2. In the left panel, go to:  
   ProxyEndpoints > default > PreFlow > Request
3. Click **+ Step**
4. Choose **Quota**, and name it Enforce-Quota

Paste this XML into the policy editor:

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>

<Quota continueOnError="false" enabled="true" name="Quota-1">

<Allow count="3"/>

<Interval>1</Interval>

<TimeUnit>minute</TimeUnit>

</Quota>

This limits usage to **3 requests per minute**.

**Step 3: Add AssignMessage Policy for Custom Fault**

1. Go to:  
   ProxyEndpoints > default > FaultRules
2. Click **+ Step**, and choose **Assign Message**, name it Assign-Message-1

Paste this policy XML:

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>

<AssignMessage continueOnError="false" enabled="true" name="Assign-Message-1">

<DisplayName>Assign Message-1</DisplayName>

<Properties/>

<Set>

<Payload contentType="application/json">

{

"error": "You have exceeded your quota limit. Please try again later."

}

</Payload>

<StatusCode>429</StatusCode>

<ReasonPhrase>Too Many Requests</ReasonPhrase>

</Set>

<AssignTo createNew="false" type="response" transport="http"/>

</AssignMessage>

**Step 4: Define the FaultRule**

Now define a FaultRule that calls the above policy when a quota is violated.

In ProxyEndpoint > default, add this XML after <PostFlow> and before <RouteRule>:

<?xml version="1.0" encoding="UTF-8" standalone="yes"?>

<ProxyEndpoint name="default">

<FaultRules>

<FaultRule name="QuotaFaultRule">

<Condition>(fault.name = "QuotaViolation")</Condition>

<Step>

<Name>Assign-Message-1</Name>

</Step>

</FaultRule>

</FaultRules>

<PreFlow name="PreFlow">

<Request>

<Step>

<Name>Quota-1</Name>

</Step>

</Request>

<Response/>

</PreFlow>

<Flows/>

<PostFlow name="PostFlow">

<Request/>

<Response/>

</PostFlow>

<HTTPProxyConnection>

<BasePath>/fr-quota</BasePath>

</HTTPProxyConnection>

<RouteRule name="default">

<TargetEndpoint>default</TargetEndpoint>

</RouteRule>

</ProxyEndpoint>

**Step 5: Deploy the Proxy**

1. Go to **Deployments** tab
2. Click **Deploy**
3. Choose your environment (e.g., eval) and click **Deploy**

**Step 6: Test the Proxy**

Use curl or Postman:

curl https://your-env-group.apigee.net/quota-fault-demo

Make **more than 3 requests in one minute**.

**Expected output after limit is exceeded:**

{

"error": "You have exceeded your quota limit. Please try again later."

}

With status code 429 Too Many Requests.