## Step 1: Set Up Salesforce DX and VS Code

import { LightningElement } from 'lwc';

1. Install VS Code and Salesforce CLI.
2. Install Salesforce Extension Pack in VS Code.
3. Authenticate to your org using:
sfdx auth:web:login -a DevOrg
4. Create a project:
sfdx force:project:create -n PublicAPIApp
5. Open the project in VS Code.
Step 2: Create a Lightning Web Component (LWC)
1. Run command:
sfdx force:lightning:component:create -n PublicDataViewer -d force-app/main/default/lwc
2. LWC Files:
- PublicDataViewer.html:
<template></template>
<li><li>dightning-card title="Public Data Viewer"&gt;</li></li>
<pre><li>dightning-input label="Enter Record Id" value={recordId} onchange={handleChange}&gt;</li></pre>
<pre><lightning-button label="Get Data" onclick="{handleClick}"></lightning-button></pre>
{result}
- PublicDataViewer.js:

```
export default class PublicDataViewer extends LightningElement {
 recordId = ";
 result;
 handleChange(event) {
  this.recordId = event.target.value;
 }
 handleClick() {
  fetch('/services/apexrest/publicdata/' + this.recordId)
   .then(res => res.json())
   .then(data => {
     this.result = JSON.stringify(data);
   })
   .catch(err => {
     this.result = 'Error fetching data';
   });
 }
}
```

### **Step 3: Create the Apex REST Class**

```
@RestResource(urlMapping='/publicdata/*')
global with sharing class PublicDataController {
    @HttpGet
```

```
global static PublicData__c getData() {
    RestRequest req = RestContext.request;
    String id = req.requestURI.substring(req.requestURI.lastIndexOf('/')+1);
    return [SELECT Id, Name, Description__c FROM PublicData__c WHERE Id = :id LIMIT 1];
}
```

#### **Step 4: Deploy Components to Org**

- 1. Save your changes.
- Use the command:sfdx force:source:deploy -p force-app
- 3. Verify deployment in your org.

#### **Step 5: Create a Lightning App Page**

- 1. Go to Lightning App Builder in Setup.
- 2. Create a new App Page.
- 3. Drag and drop the 'PublicDataViewer' component onto the page.
- 4. Activate and assign it to apps/navigation.

### Step 6: Make API Public via Sites (Optional)

- 1. Setup > Sites > Create Site.
- 2. Set Visualforce Page as home page (if needed).
- 3. Grant Guest User access to Apex Class and object permissions.

# **Security Note**

- Use authentication for sensitive APIs.
- Always restrict Guest User access to necessary objects and fields only.