**Step 1: Define the SOAP Web Service Structure**

Firstly, create a new package within your application dedicated to the SOAP web service:

* Package: com.yourcompany.yourproject.soap

Within this package, create the following classes:

1. **SOAP Endpoint Class**: This will be your SOAP web service endpoint.
   * Class: EnergyDataSoapEndpoint
   * Annotations: @Endpoint
   * Purpose: To handle incoming SOAP requests related to energy data.
2. **Request and Response Classes**: Define classes to handle SOAP request and response.
   * Class: GetEnergyDataRequest
   * Purpose: To encapsulate the input parameters from the SOAP request (e.g., search term).
   * Class: GetEnergyDataResponse
   * Purpose: To encapsulate the energy data returned as a response to the SOAP request.

**Step 2: Leverage Existing Data Fetching Service**

You already have a service for fetching data (EnergyDataService). You'll utilize this service within your SOAP endpoint to fetch the XML data based on the criteria received from the SOAP request.

* Modify EnergyDataService to add a method that can accept parameters (e.g., search terms) to fetch and return the necessary XML data.

**Step 3: Implement XPath Search Functionality**

Introduce a new class or method within the SOAP package or as a utility to perform the XPath search on the fetched XML data:

* Class/Method: XPathSearchUtility (You can also integrate this directly within the EnergyDataSoapEndpoint if you prefer minimalism).
* Purpose: To execute XPath queries on the fetched XML and return the result.

**Step 4: JAXB Validation Service**

Although you have JAXB unmarshalling and validation in XmlXsdUtil, consider encapsulating the JAXB validation logic within a distinct service for better separation of concerns and reusability:

* Package: com.yourcompany.yourproject.validation
* Class: JaxbValidationService
* Purpose: To provide a service method that takes XML data as input, validates it against an XSD schema (utilizing the existing XmlXsdUtil.validate method), and returns the validation result.

**Integration:**

* The EnergyDataSoapEndpoint will use the EnergyDataService to fetch data and the XPathSearchUtility to perform the XPath search. The result will be formatted into a GetEnergyDataResponse and sent back as the SOAP response.
* The JaxbValidationService can be used within your application wherever JAXB validation is necessary, ensuring that the XML conforms to the expected schema.