



Bài 2

Phát Triển Web Services Với Big Web Service

- ❖ Tạo ứng dụng web client sử dụng các phương thức được cung cấp bởi Big Web services:
 - ❖ Load
 - ❖ Insert
 - ❖ Detail
 - ❖ Update
 - ❖ Delete

Tạo ứng dụng dynamic web project

New Dynamic Web Project

Dynamic Web Project
Create a standalone Dynamic Web project or add it to a new or existing Enterprise Application.

Project name:

Project location
☒ Use default location
Location:

Target runtime

Dynamic web module version

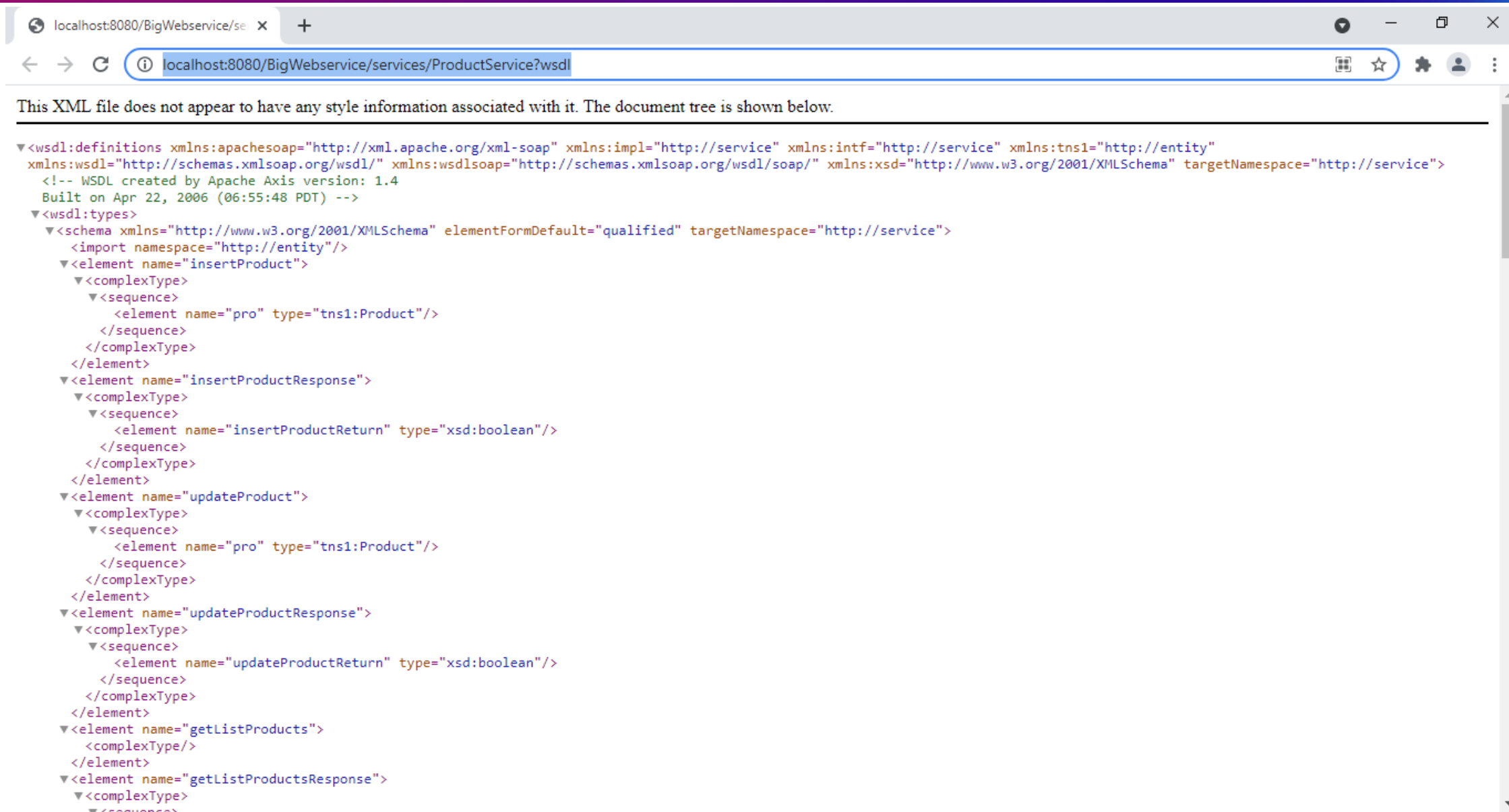
Configuration

A good starting point for working with Apache Tomcat v9.0 runtime. Additional facets can later be installed to add new functionality to the project.

EAR membership
☐ Add project to an EAR
EAR project name:

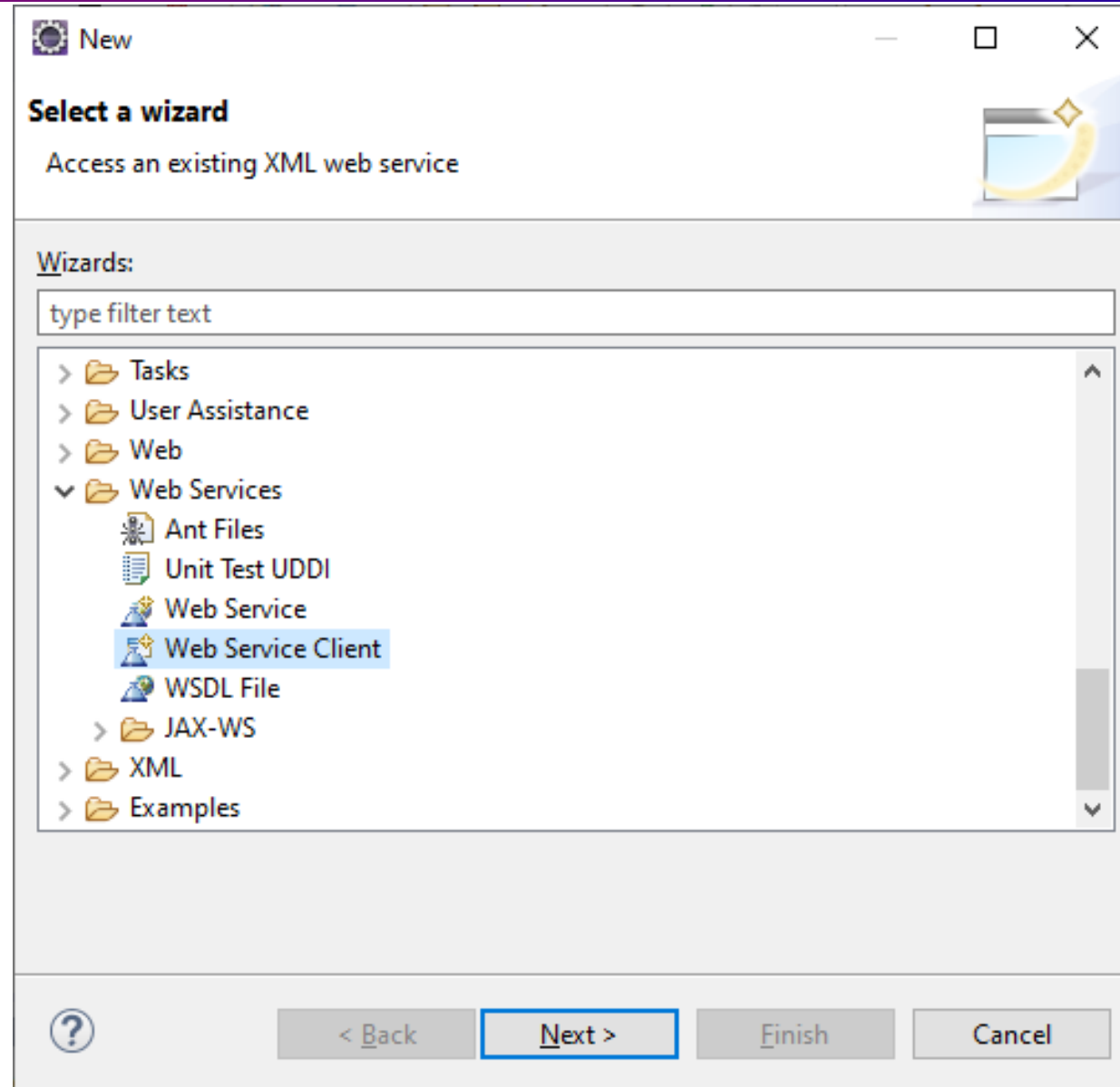
Working sets
☐ Add project to working sets
Working sets:

Lấy đường dẫn của wsdl từ big web service



This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
<?xml version="1.0" encoding="UTF-8"?>
<wsdl:definitions xmlns:apachesoap="http://xml.apache.org/xml-soap" xmlns:impl="http://service" xmlns:intf="http://service" xmlns:tns1="http://entity"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/" xmlns:wsdlsoap="http://schemas.xmlsoap.org/wsdl/soap/" xmlns:xsd="http://www.w3.org/2001/XMLSchema" targetNamespace="http://service">
  <!-- WSDL created by Apache Axis version: 1.4
  Built on Apr 22, 2006 (06:55:48 PDT) -->
  <wsdl:types>
    <schema xmlns="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified" targetNamespace="http://service">
      <import namespace="http://entity"/>
      <element name="insertProduct">
        <complexType>
          <sequence>
            <element name="pro" type="tns1:Product"/>
          </sequence>
        </complexType>
      </element>
      <element name="insertProductResponse">
        <complexType>
          <sequence>
            <element name="insertProductReturn" type="xsd:boolean"/>
          </sequence>
        </complexType>
      </element>
      <element name="updateProduct">
        <complexType>
          <sequence>
            <element name="pro" type="tns1:Product"/>
          </sequence>
        </complexType>
      </element>
      <element name="updateProductResponse">
        <complexType>
          <sequence>
            <element name="updateProductReturn" type="xsd:boolean"/>
          </sequence>
        </complexType>
      </element>
      <element name="getListProducts">
        <complexType/>
      </element>
      <element name="getListProductsResponse">
        <complexType>
          <sequence>
```



Paste đường dẫn của file wsdl


Web Service Client

Web Services
Select a service definition and move the slider to set the level of client generation.

Service definition:

Client type:

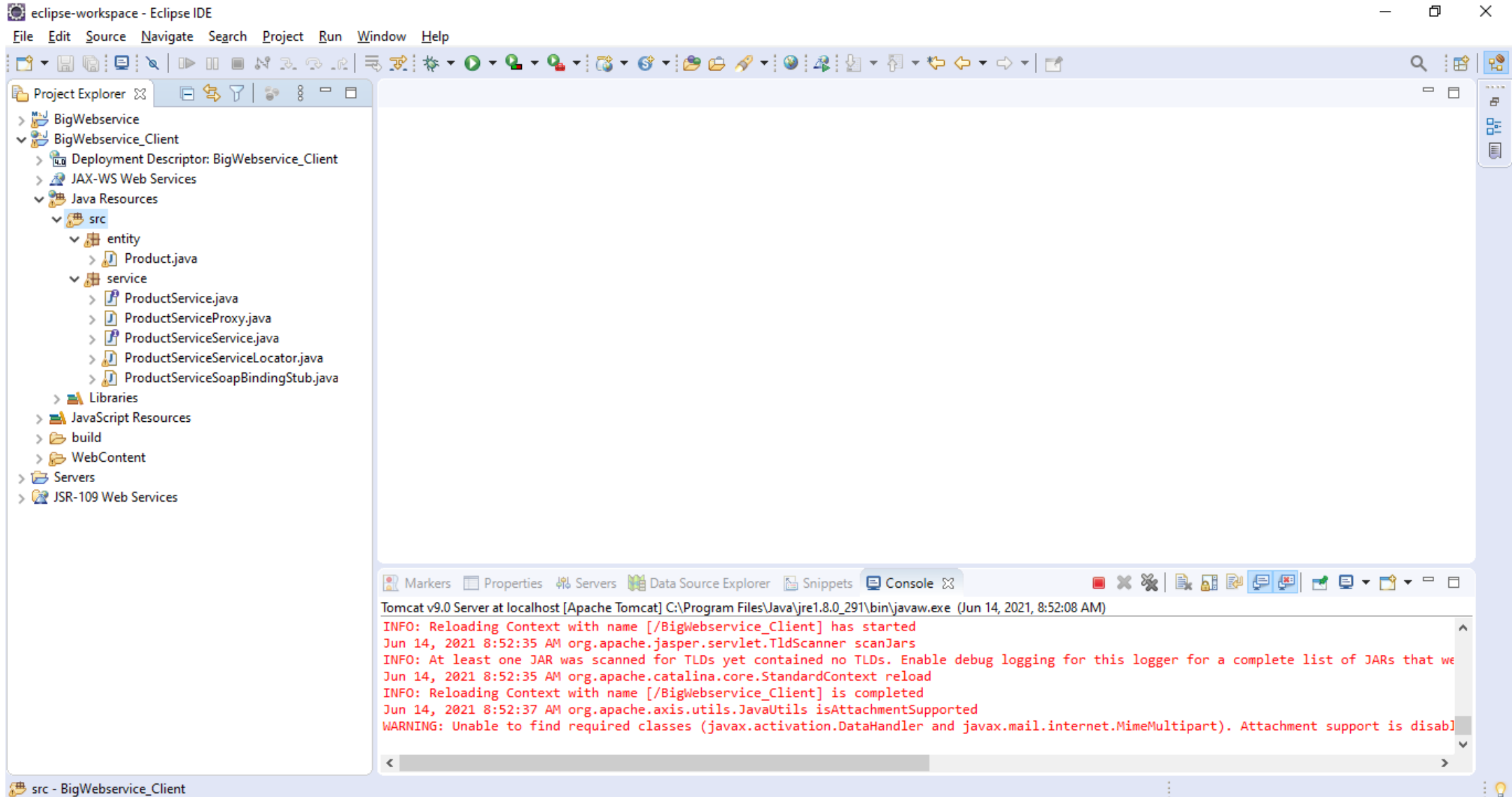
Test client



☐ Monitor the Web service

Configuration:
[Server runtime: Tomcat v9.0 Server](#)
[Web service runtime: Apache Axis \(Deprecated\)](#)
[Client project: BigWebservice Client](#)

Web service client được tạo bên client



Test chức năng get all data

eclipse-workspace - BigWebservice_Client/src/test/TestGetAll.java - Eclipse IDE

File Edit Refactor Source Navigate Search Project Run Window Help

Project Explorer

- BigWebservice
- BigWebservice_Client
 - Deployment Descriptor: BigWebservice_Client
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 - entity
 - Product.java
 - service
 - ProductService.java
 - ProductServiceProxy.java
 - ProductServiceService.java
 - ProductServiceServiceLocator.java
 - ProductServiceSoapBindingStub.java
 - Libraries
 - test
 - TestGetAll.java**
 - JavaScript Resources
 - build
 - WebContent
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 - JSR-109 Web Services

TestGetAll.java

```
1 package test;
2
3 import java.rmi.RemoteException;
4 import java.util.Arrays;
5 import java.util.List;
6
7 import javax.xml.rpc.ServiceException;
8
9 import entity.Product;
10 import service.ProductService;
11 import service.ProductServiceServiceLocator;
12
13 public class TestGetAll {
14
15     public static void main(String[] args) {
16         // TODO Auto-generated method stub
17         ProductServiceServiceLocator locator = new ProductServiceServiceLocator();
18         try {
19             ProductService productService = locator.getProductService();
20             Product[] listProducts = productService.getListProducts();
21
22             List<Product> list = Arrays.asList(listProducts);
23             for (Product p : list) {
24                 System.out.println("Product:");
25                 System.out.println("\tProduct Id: "+p.getProId());
26                 System.out.println("\tProduct Name: "+p.getProName());
27                 System.out.println("\tProducer: "+p.getProducer());
28                 System.out.println("\tYear Making: "+p.getYearMaking());
29                 System.out.println("\tExpire Date: "+p.getExpireDate());
30                 System.out.println("\tPrice: "+p.getPrice());
31             }
32         } catch (ServiceException e) {
33             // TODO Auto-generated catch block
34             e.printStackTrace();
35         } catch (RemoteException e) {
36             // TODO Auto-generated catch block
37             e.printStackTrace();
38         }
39     }
40 }
```

Writable Smart Insert 29 : 53 : 974

Kết quả chức năng get all data

```
eclipse-workspace - BigWebservice_Client/src/test/TestGetAll.java - Eclipse IDE
File Edit Refactor Source Navigate Search Project Run Window Help

<terminated> TestGetAll [Java Application] C:\Program Files\Java\jre1.8.0_291\bin\javaw.exe (Jun 14, 2021, 8:58:00 AM – 8:58:05 AM)
Jun 14, 2021 8:58:00 AM org.apache.axis.utils.JavaUtils isAttachmentSupported
WARNING: Unable to find required classes (javax.activation.DataHandler and javax.mail.internet.MimeMultipart). Attachment support is disabled.
Product:
  Product Id: 1
  Product Name: Tivi
  Producer: Toshiba
  Year Making: 2019
  Expire Date: java.util.GregorianCalendar[time=1589475600000,areFieldsSet=true,areAllFieldsSet=true,lenient=true,zone=sun.util.calendar.ZoneInfo[id="GMT",offset=0,dstSavings=0
  Price: 7000000.0
Product:
  Product Id: 2
  Product Name: Máy tính acer core i3
  Producer: Acer
  Year Making: 2020
  Expire Date: java.util.GregorianCalendar[time=1624520915490,areFieldsSet=true,areAllFieldsSet=true,lenient=true,zone=sun.util.calendar.ZoneInfo[id="GMT",offset=0,dstSavings=0
  Price: 8500000.0
```

Test chức năng insert data

eclipse-workspace - BigWebservice_Client/src/test/TestInsert.java - Eclipse IDE

File Edit Refactor Source Navigate Search Project Run Window Help

The screenshot shows the Eclipse IDE interface. On the left, the Project Explorer displays the project structure: BigWebservice_Client > Java Resources > src > service > TestInsert.java. The main editor shows the code for TestInsert.java, which includes a main method that creates a ProductServiceLocator, gets a ProductService, creates a Product object with specific attributes, and calls insertProduct. The console at the bottom shows the execution output, including a warning about missing classes for attachment support, followed by the message 'Successfully!'.

```
14 public class TestInsert {
15
16     public static void main(String[] args) {
17         // TODO Auto-generated method stub
18         ProductServiceServiceLocator locator = new ProductServiceServiceLocator();
19         try {
20             ProductService productService = locator.getProductService();
21
22             Product p = new Product();
23             p.setProName("Tủ lạnh");
24             p.setProducer("Sanyo");
25             p.setYearMaking(2020);
26             p.setExpireDate(Calendar.getInstance());
27             p.setPrice(8000000D);
28
29             boolean b1 = productService.insertProduct(p);
30             System.out.println(b1?"Successfully!":"Failed!");
31         } catch (ServiceException e) {
32             // TODO Auto-generated catch block
33             e.printStackTrace();
34         } catch (RemoteException e) {
35             // TODO Auto-generated catch block
36             e.printStackTrace();
37         }
38     }
39 }
```

<terminated> TestInsert [Java Application] C:\Program Files\Java\jre1.8.0_291\bin\javaw.exe (Jun 14, 2021, 9:02:03 AM – 9:02:04 AM)
Jun 14, 2021 9:02:04 AM org.apache.axis.utils.JavaUtils isAttachmentSupported
WARNING: Unable to find required classes (javax.activation.DataHandler and javax.mail.internet.MimeMultipart). Attachment support is disabled
Successfully!

Test chức năng update data

eclipse-workspace - BigWebservice_Client/src/test/TestUpdate.java - Eclipse IDE

File Edit Refactor Source Navigate Search Project Run Window Help

Project Explorer

- BigWebservice
- BigWebservice_Client
 - Deployment Descriptor: BigWebservice_Client
 - JAX-WS Web Services
 - Java Resources
 - src
 - entity
 - Product.java
 - service
 - ProductService.java
 - ProductServiceProxy.java
 - ProductServiceService.java
 - ProductServiceServiceLocator.java
 - ProductServiceSoapBindingStub.java
 - Libraries
 - test
 - TestGetAll.java
 - TestInsert.java
 - TestUpdate.java
 - JavaScript Resources
 - build
 - WebContent
 - Servers
 - JSR-109 Web Services

TestUpdate.java

```
13 import java.rmi.RemoteException;
14 public class TestUpdate {
15
16     public static void main(String[] args) {
17         // TODO Auto-generated method stub
18         ProductServiceServiceLocator locator = new ProductServiceServiceLocator();
19         try {
20             ProductService productService = locator.getProductService();
21
22             Product p = new Product();
23             p.setProId(3);
24             p.setProName("Tủ lạnh update");
25             p.setProducer("Sanyo update");
26             p.setYearMaking(2020);
27             p.setExpireDate(Calendar.getInstance());
28             p.setPrice(180000000);
29
30             boolean b1 = productService.updateProduct(p);
31             System.out.println(b1?"Successfully!":"Failed!");
32         } catch (ServiceException e) {
33             // TODO Auto-generated catch block
34             e.printStackTrace();
35         } catch (RemoteException e) {
36             // TODO Auto-generated catch block
37             e.printStackTrace();
38         }
39     }
40 }
```

Markers Properties Servers Data Source Explorer Snippets Console

<terminated> TestUpdate [Java Application] C:\Program Files\Java\jre1.8.0_291\bin\javaw.exe (Jun 14, 2021, 9:03:39 AM – 9:03:41 AM)

Jun 14, 2021 9:03:40 AM org.apache.axis.utils.JavaUtils isAttachmentSupported

WARNING: Unable to find required classes (javax.activation.DataHandler and javax.mail.internet.MimeMultipart). Attachment support is disabled

Successfully!

Writable Smart Insert 30:54 [13]

Test chức năng get by id

The screenshot shows the Eclipse IDE interface. The Project Explorer on the left displays the project structure for 'BigWebservice_Client', including 'src' (entity, service) and 'test' (TestGetAll.java, TestGetById.java, TestInsert.java, TestUpdate.java). The main editor shows the code for 'TestGetById.java'.

```
10
11 public class TestGetById {
12
13     public static void main(String[] args) {
14         // TODO Auto-generated method stub
15         ProductServiceLocator locator = new ProductServiceLocator();
16         try {
17             ProductService productService = locator.getProductService();
18             Product p = productService.getProductById(3);
19
20             System.out.println("Product:");
21             System.out.println("\tProduct Id: " + p.getProId());
22             System.out.println("\tProduct Name: " + p.getProName());
23             System.out.println("\tProducer: " + p.getProducer());
24             System.out.println("\tYear Making: " + p.getYearMaking());
25             System.out.println("\tExpire Date: " + p.getExpireDate());
26             System.out.println("\tPrice: " + p.getPrice());
27         } catch (ServiceException e) {
28             // TODO Auto-generated catch block
29             e.printStackTrace();
30         } catch (RemoteException e) {
31             // TODO Auto-generated catch block
32             e.printStackTrace();
33         }
34     }
35 }
```

The Console window at the bottom shows the output of the test run:

```
<terminated> TestGetById [Java Application] C:\Program Files\Java\jre1.8.0_291\bin\javaw.exe (Jun 14, 2021, 9:06:52 AM - 9:06:53 AM)
WARNING: Unable to find required classes (javax.activation.DataHandler and javax.mail.internet.MimeMultipart). Attachment support is disabled
Product:
Product Id: 3
Product Name: T? l?nh update
Producer: Sanyo update
Year Making: 2020
Expire Date: java.util.GregorianCalendar[time=1623636220683,areFieldsSet=true,areAllFieldsSet=true,lenient=true,zone=sun.util.caler
Price: 1.8E7
```

Test chức năng delete

eclipse-workspace - BigWebservice_Client/src/test/TestDelete.java - Eclipse IDE

File Edit Refactor Source Navigate Search Project Run Window Help

Project Explorer

- BigWebservice
- BigWebservice_Client
 - Deployment Descriptor: BigWebservice_Client
 - JAX-WS Web Services
 - Java Resources
 - src
 - entity
 - Product.java
 - service
 - ProductService.java
 - ProductServiceProxy.java
 - ProductServiceService.java
 - ProductServiceServiceLocator.java
 - ProductServiceSoapBindingStub.java
 - Libraries
 - test
 - TestDelete.java**
 - TestGetAll.java
 - TestGetById.java
 - TestInsert.java
 - TestUpdate.java
 - JavaScript Resources
 - build
 - WebContent
 - Servers
 - JSR-109 Web Services

TestDelete.java

```
1 package test;
2
3 import java.rmi.RemoteException;
13
14 public class TestDelete {
15
16     public static void main(String[] args) {
17         // TODO Auto-generated method stub
18         ProductServiceServiceLocator locator = new ProductServiceServiceLocator();
19         try {
20             ProductService productService = locator.getProductService();
21
22             boolean b1 = productService.deleteProduct(3);
23             System.out.println(b1?"Delete successfully!":"Delete failed!");
24         } catch (ServiceException e) {
25             // TODO Auto-generated catch block
26             e.printStackTrace();
27         } catch (RemoteException e) {
28             // TODO Auto-generated catch block
29             e.printStackTrace();
30         }
31     }
32 }
33 }
```

Markers Properties Servers Data Source Explorer Snippets Console

<terminated> TestDelete [Java Application] C:\Program Files\Java\jre1.8.0_291\bin\javaw.exe (Jun 14, 2021, 9:08:12 AM – 9:08:13 AM)

Jun 14, 2021 9:08:12 AM org.apache.axis.utils.JavaUtils isAttachmentSupported
WARNING: Unable to find required classes (javax.activation.DataHandler and javax.mail.internet.MimeMultipart). Attachment support is disabled

Delete successfully!

Writable Smart Insert 22:58:597

HỎI ĐÁP





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