**REG NO. : 412422205009**

**NAME : AKASH RAJ L**

**SOURCE CODE :**

**CC1.java**

package com.cc;

import javax.jws.WebService;

@WebService(endpointInterface = "com.cc.CCI") // Link to the interface CCI

public class CC1 implements CCI {

@Override

public double convertCurrency(String fromCurrency, String toCurrency, double amount) {

// Simple conversion logic (mocked with a static conversion rate)

double conversionRate = 1.2; // Mock conversion rate for demonstration

if (fromCurrency.equals("USD") && toCurrency.equals("EUR")) {

return amount \* conversionRate;

} else if (fromCurrency.equals("EUR") && toCurrency.equals("USD")) {

return amount / conversionRate;

} else {

return amount; // If currencies are the same

}

}

}

**Client.java**

package com.cc;

import javax.xml.namespace.QName;

import javax.xml.ws.Service;

import java.net.URL;

public class Client {

public static void main(String[] args) {

try {

// The URL of the WSDL file for the web service

URL url = new URL("http://localhost:8080/CC/CC1Service?WSDL");

// The QName must match the service name and the target namespace from the WSDL

QName qname = new QName("http://cc.com/", "CC1Service");

// Create a Service object from the WSDL URL and QName

Service service = Service.create(url, qname);

// Get the port (the client-side proxy) for the CCI interface

CCI port = service.getPort(CCI.class);

// Call the method on the service and print the result

double result = port.convertCurrency("USD", "EUR", 100.0);

System.out.println("Converted Amount: " + result);

} catch (Exception e) {

e.printStackTrace();

}

}

}

**CCI.java**

package com.cc;

import javax.jws.WebService;

import javax.jws.WebMethod;

@WebService

public interface CCI {

@WebMethod

double convertCurrency(String fromCurrency, String toCurrency, double amount);

}

**CurrencyConverter.jsp**

<%@ page import="javax.xml.namespace.QName" %>

<%@ page import="java.net.URL" %>

<%@ page import="javax.xml.ws.Service" %>

<%@ page import="com.cc.CCI" %> <!-- Import the web service interface -->

<%@ page contentType="text/html; charset=UTF-8" language="java" %>

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>Currency Converter</title>

<style>

body { font-family: Arial, sans-serif; padding: 20px; }

.form-container { margin-top: 20px; }

input, select { padding: 10px; margin: 5px 0; }

</style>

</head>

<body>

<h1>Currency Converter</h1>

<!-- Form to input the currency and amount -->

<form action="CurrencyConverter.jsp" method="post">

<label for="fromCurrency">From Currency:</label>

<select id="fromCurrency" name="fromCurrency">

<option value="USD">USD</option>

<option value="EUR">EUR</option>

</select><br>

<label for="toCurrency">To Currency:</label>

<select id="toCurrency" name="toCurrency">

<option value="EUR">EUR</option>

<option value="USD">USD</option>

</select><br>

<label for="amount">Amount:</label>

<input type="number" id="amount" name="amount" required /><br>

<input type="submit" value="Convert" />

</form>

<div class="form-container">

<%

// Get form parameters

String fromCurrency = request.getParameter("fromCurrency");

String toCurrency = request.getParameter("toCurrency");

String amountStr = request.getParameter("amount");

double convertedAmount = 0;

// If parameters are available, invoke the web service

if (fromCurrency != null && toCurrency != null && amountStr != null) {

try {

double amount = Double.parseDouble(amountStr);

// Construct the WSDL URL and service QName

URL url = new URL("http://localhost:8080/CC/CC1Service?WSDL");

QName qname = new QName("http://cc.com/", "CC1Service");

// Create the service and get the port (interface)

Service service = Service.create(url, qname);

CCI port = service.getPort(CCI.class); // Use the CCI interface

// Call the web service method

convertedAmount = port.convertCurrency(fromCurrency, toCurrency, amount);

} catch (Exception e) {

out.println("<p style='color: red;'>Error: " + e.getMessage() + "</p>");

}

}

// Display the result if available

if (convertedAmount != 0) {

out.println("<h3>Converted Amount: " + convertedAmount + "</h3>");

}

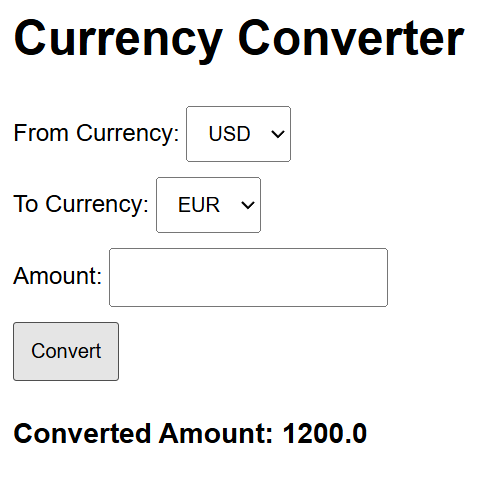
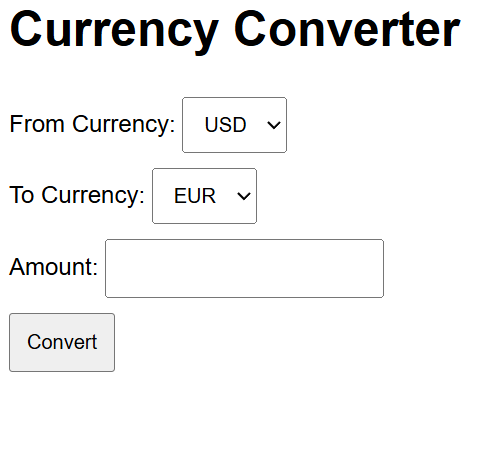
%>

</div>

</body>

</html>

**OUTPUT :**

****