Calculator.java

my tp

package org.example;

import java.io.BufferedReader;

import java.io.IOException;

import java.io.InputStreamReader;

import java.net.HttpURLConnection;

import java.net.URL;

public class DistributedApplication {

public static void main(String[] args) {

try {

double a = 10.5;

double b = 5.5;

// Addition

URL addUrl = new URL("http://localhost:8085/add/" + a + "/" + b);

double resultAdd = *sendRequest*(addUrl);

// Subtraction

URL subtractUrl = new URL("http://localhost:8085/subtract/" + a + "/" + b);

double resultSubtract = *sendRequest*(subtractUrl);

// Multiplication

URL multiplyUrl = new URL("http://localhost:8085/multiply/" + a + "/" + b);

double resultMultiply = *sendRequest*(multiplyUrl);

// Division

URL divideUrl = new URL("http://localhost:8085/divide/" + a + "/" + b);

double resultDivide = *sendRequest*(divideUrl);

System.*out*.println("Addition: " + resultAdd);

System.*out*.println("Subtraction: " + resultSubtract);

System.*out*.println("Multiplication: " + resultMultiply);

System.*out*.println("Division: " + resultDivide);

} catch (IOException e) {

e.printStackTrace();

}

}

private static double sendRequest(URL url) throws IOException {

HttpURLConnection connection = (HttpURLConnection) url.openConnection();

connection.setRequestMethod("GET");

int responseCode = connection.getResponseCode();

if (responseCode == HttpURLConnection.*HTTP\_OK*) {

BufferedReader reader = new BufferedReader(new InputStreamReader(connection.getInputStream()));

String response = reader.readLine();

reader.close();

return Double.*parseDouble*(response);

} else {

System.*out*.println("Error occurred while accessing the web service. Response code: " + responseCode);

return 0.0;

}

}

}

<dependencies>

<dependency>

<groupId>org.springframework</groupId>

<artifactId>spring-web</artifactId>

<version>5.3.27</version>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-autoconfigure</artifactId>

<version>2.7.12</version>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-web</artifactId>

</dependency>

</dependencies>

package com.unique;

import javax.jws.WebService;

import javax.jws.WebMethod;

import javax.jws.WebParam;

/\*\*

\*

\* @author Mahi's Pc

\*/

@WebService(serviceName = "calculator")

public class calculator {

/\*\*

\* Web service operation

\*/

@WebMethod(operationName = "getNumber")

public int getNumber(@WebParam(name = "num1") int num1, @WebParam(name = "num2") int num2) {

int sum = num1 + num2;

return sum;

}

/\*\*

\* This is a sample web service operation

\*/

}

Calculator.java

import com.unique.Calculator\_Service;

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.ServletException;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import javax.xml.ws.WebServiceRef;

/\*\*

\*

\* @author Mahi's Pc

\*/

public class Calculator extends HttpServlet {

@WebServiceRef(wsdlLocation = "WEB-INF/wsdl/localhost\_8080/Calculatorwebservice/calculator.wsdl")

private Calculator\_Service service;

/\*\*

\* Processes requests for both HTTP <code>GET</code> and <code>POST</code>

\* methods.

\*

\* @param request servlet request

\* @param response servlet response

\* @throws ServletException if a servlet-specific error occurs

\* @throws IOException if an I/O error occurs

\*/

protected void processRequest(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

response.setContentType("text/html;charset=UTF-8");

try (PrintWriter out = response.getWriter()) {

/\* TODO output your page here. You may use following sample code. \*/

int num1,num2;

num1 = Integer.parseInt(request.getParameter("txt1"));

num2 = Integer.parseInt(request.getParameter("txt2"));

out.println("<!DOCTYPE html>");

out.println("<html>");

out.println("<head>");

out.println("<title>Servlet Calculator</title>");

out.println("</head>");

out.println("<body>");

out.println("<h1>"+getNumber(num1, num2) + "</h1>");

out.println("</body>");

out.println("</html>");

}

}

// <editor-fold defaultstate="collapsed" desc="HttpServlet methods. Click on the + sign on the left to edit the code.">

/\*\*

\* Handles the HTTP <code>GET</code> method.

\*

\* @param request servlet request

\* @param response servlet response

\* @throws ServletException if a servlet-specific error occurs

\* @throws IOException if an I/O error occurs

\*/

@Override

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

processRequest(request, response);

}

/\*\*

\* Handles the HTTP <code>POST</code> method.

\*

\* @param request servlet request

\* @param response servlet response

\* @throws ServletException if a servlet-specific error occurs

\* @throws IOException if an I/O error occurs

\*/

@Override

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

processRequest(request, response);

}

/\*\*

\* Returns a short description of the servlet.

\*

\* @return a String containing servlet description

\*/

@Override

public String getServletInfo() {

return "Short description";

}// </editor-fold>

private int getNumber(int num1, int num2) {

// Note that the injected javax.xml.ws.Service reference as well as port objects are not thread safe.

// If the calling of port operations may lead to race condition some synchronization is required.

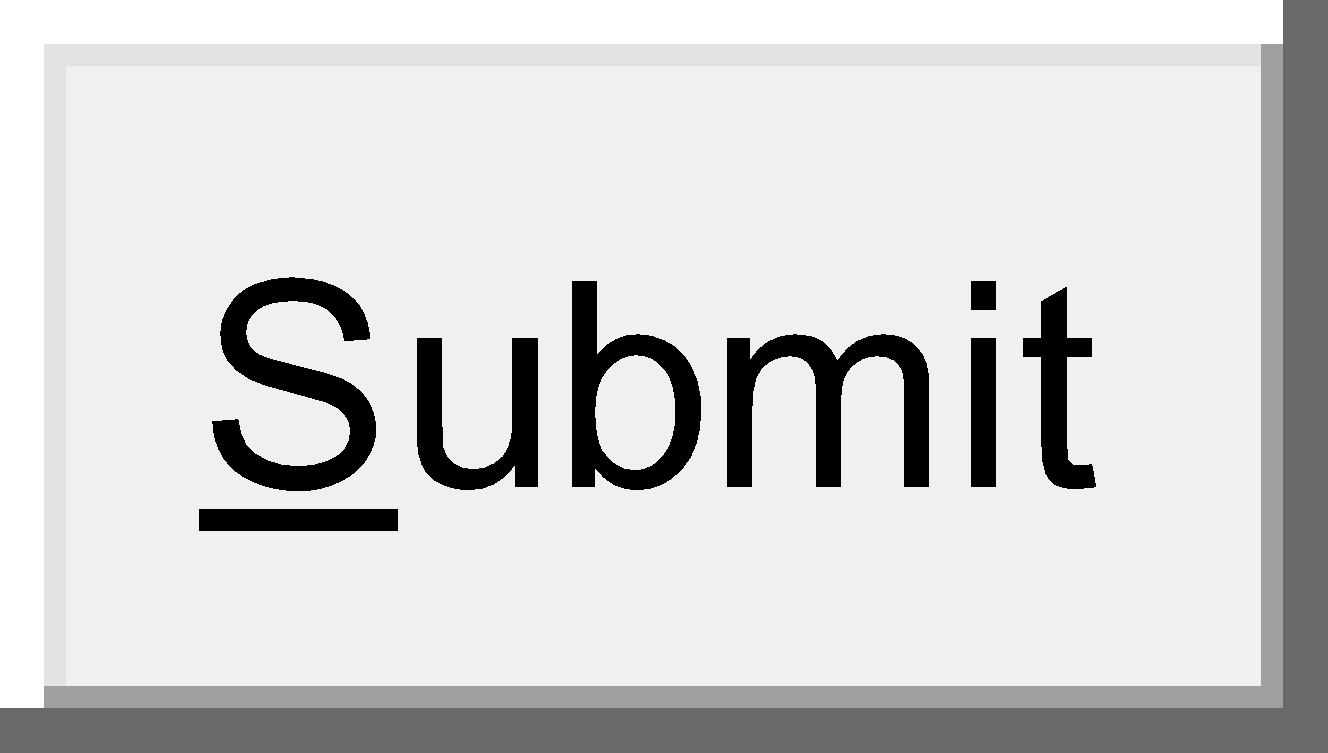
com.unique.Calculator port = service.getCalculatorPort();

return port.getNumber(num1, num2);

}

}

Index.html

Enter Number 1 :   
Enter Number 2 :   


Outputs :

