



Course Name: Web Services Security Lab

Course code: CSB-422

Experiment: 5

Aim: Write a program to implement Web based service consumer **Tools/Software**

Required: Netbeans IDE

Pseudo code/Algorithms/Flowchart/Steps:

- 1) Goto File>New Project , choose Java web> web Application, click next and finish.
- 2) Right click new project folder and goto other New>option from the menu, a new window wil appear choose Web services> Web service client option and click next.
- 3) In the next screen click the WSDL url option radio button and copy the below url in the textbox given.

<https://ecs.syr.edu/faculty/fawcett/Handouts/cse775/code/calcWebService/Calc.asmx?WSDL>

Click finish

- 5 Right click the project folder and goto New>other, goto Web> JSP.
- 6 Repeat step 5 4 more times and name the files add.jsp, sub.jsp, divide.jsp and multiply.jsp

Implementation:



```
package
addition;

import
javax.jws.WebService; import
javax.jws.WebMethod;
import
javax.jws.WebParam;

/**
 *
 * @author
 */
@WebService(serviceName =
"Addition") public class Addition
{

    /**
     * Web service operation
     */
    @WebMethod(operationName = "additon")
    public Integer additon(@WebParam(name = "a") int a, @WebParam(name = "b") int b) {
        //TODO write your implementation
        code here: return a+b;
    }

    /**
     * This is a sample web service operation */
}
```

Output:



http://localhost:8080/youtubewebsevice/Addition?Tester Method invocation trace x



additon Method invocation

Method parameter(s)

Type	Value
int	3
int	4

Method returned

java.lang.Integer : "7"

SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?><S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <S:Body>
    <ns2:additon xmlns:ns2="http://addition/">
      <a>3</a>
      <b>4</b>
    </ns2:additon>
  </S:Body>
</S:Envelope>
```

SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?><S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <S:Body>
    <ns2:additonResponse xmlns:ns2="http://addition/">
      <return>7</return>
    </ns2:additonResponse>
  </S:Body>
</S:Envelope>
```

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http://localhost:8080/youtubewebsevice/Addition?Tester Addition Web Service Tester

Addition Web Service Tester

This form will allow you to test your web service implementation ([WSDL File](#))

To invoke an operation, fill the method parameter(s) input boxes and click on the button labeled with the method name.

Methods :

public abstract java.lang.Integer addition.Addition.additon(int,int)

additon (3 4)

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