

Assignment-7 - NetBeans IDE 8.2

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Search (Ctrl+F)

Projects Services

Assignment-7

- Web Pages
- Source Packages
- Libraries
- Web Services
  - MyCalculatorWebService
    - addition: double
    - division: double
    - multiplication: double
    - subtraction: double
- Configuration Files

index.html MyCalculatorWebService.java

Source Design History

```
22  @WebMethod(operationName = "addition")
23  public double addition(@WebParam(name = "num1") double num1, @WebParam(name = "num2") double num2) {
24      //TODO write your implementation code here:
25      return num1 + num2;
26  }
27  /**
28   * Web service operation
29  */
30  @WebMethod(operationName = "subtraction")
31  public double subtraction(@WebParam(name = "num1") double num1, @WebParam(name = "num2") double num2) {
32      //TODO write your implementation code here:
33  }
```

Output - Assignment-7 (dist)

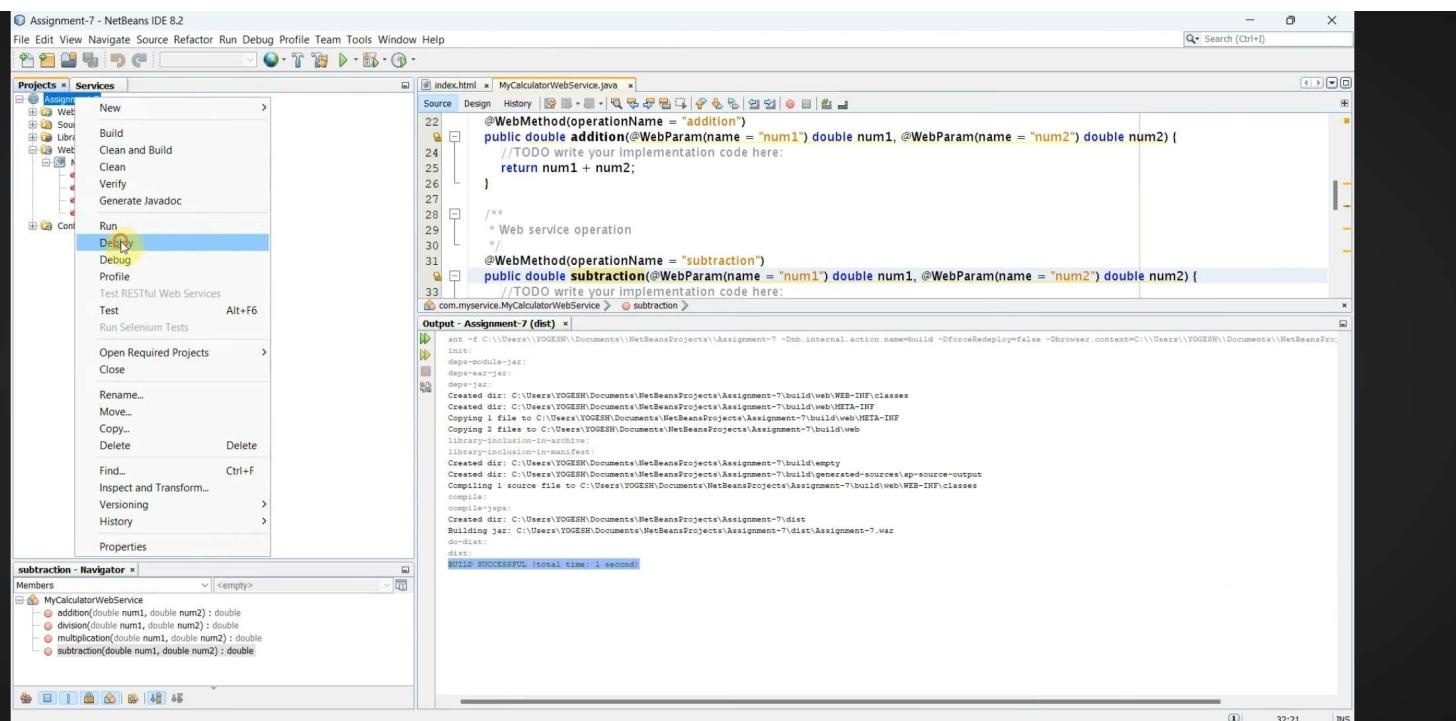
```
ant -f C:\Users\YOGESH\Documents\NetBeansProjects\Assignment-7 -Dnb.internal.action.name=build -DforceRedeploy=false -Dbrowser.context=C:\Users\YOGESH\Documents\NetBeansProjects\Assignment-7 dist
init:
deps-module-jar:
deps-war-jar:
Created dir: C:\Users\YOGESH\Documents\NetBeansProjects\Assignment-7\build\web\WEB-INF\classes
Created dir: C:\Users\YOGESH\Documents\NetBeansProjects\Assignment-7\build\web\META-INF
Copying 1 file to C:\Users\YOGESH\Documents\NetBeansProjects\Assignment-7\build\web\META-INF
Copying 1 files to C:\Users\YOGESH\Documents\NetBeansProjects\Assignment-7\build\web\WEB-INF
library-inclusion-in-manifest:
Created dir: C:\Users\YOGESH\Documents\NetBeansProjects\Assignment-7\build\empty
Created dir: C:\Users\YOGESH\Documents\NetBeansProjects\Assignment-7\build\generated-sources\ap-source-output
Compiling 1 source file to C:\Users\YOGESH\Documents\NetBeansProjects\Assignment-7\build\web\WEB-INF\classes
compile-jdeps:
Created dir: C:\Users\YOGESH\Documents\NetBeansProjects\Assignment-7\dist
Building jar: C:\Users\YOGESH\Documents\NetBeansProjects\Assignment-7\dist\Assignment-7.war
dotdist:
dist:
BUILD SUCCESSFUL (total time: 1 second)
```

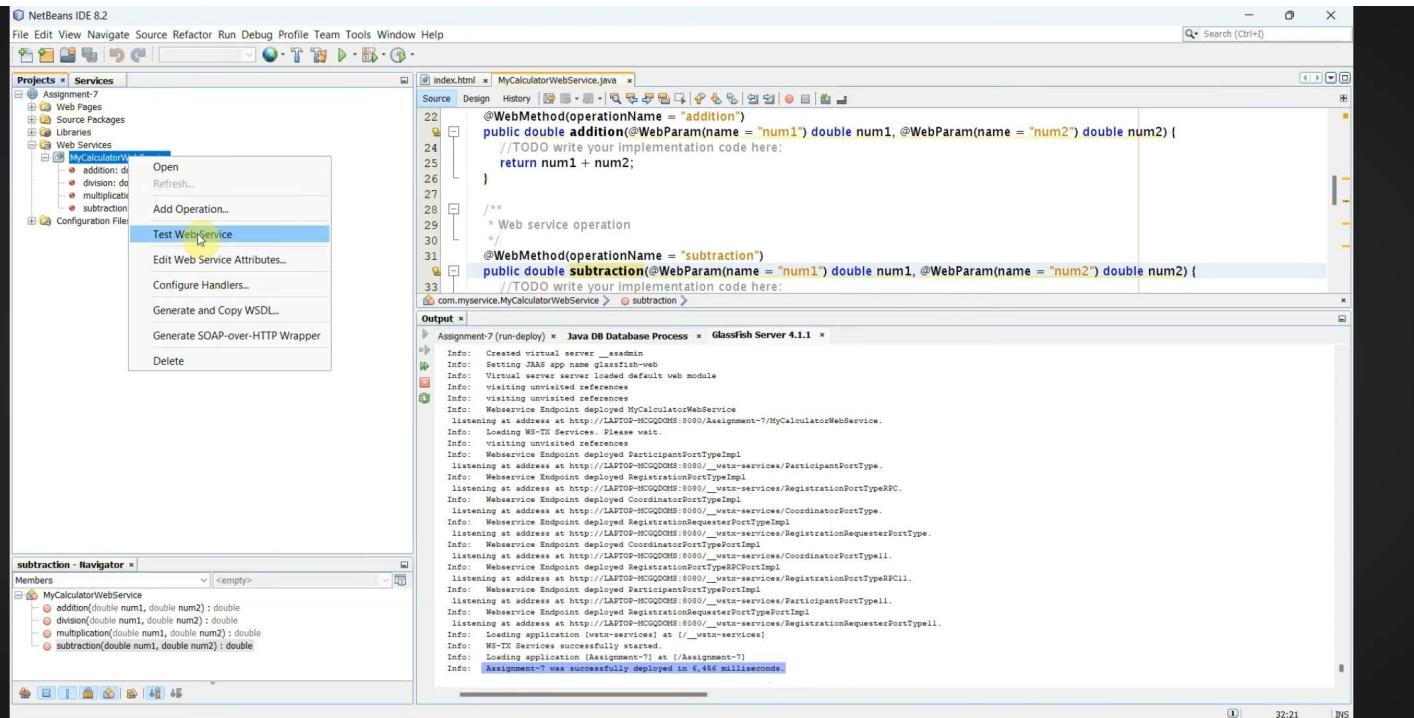
subtraction - Navigator

Members

- MyCalculatorWebService
  - addition(double num1, double num2) : double
  - division(double num1, double num2) : double
  - multiplication(double num1, double num2) : double
  - subtraction(double num1, double num2) : double

Finished building Assignment-7 (dist).





The screenshot shows a web browser window with the title "MyCalculatorWebService Web Service Tester". The URL in the address bar is "localhost:8080/Assignment-7/MyCalculatorWebService?Tester". The page content includes:

- A note: "This form will allow you to test your web service implementation ([WSDL File](#))".
- A note: "To invoke an operation, fill the method parameter(s) input boxes and click on the button labeled with the method name."
- A section titled "Methods :".
- Four method definitions with input fields:
  - division | (50    - multiplication | (   - addition | (   - subtraction | (

BE\_IT\_2019\_Course\_Syllabus.pdf   Method invocation trace   localhost:8080/Assignment-7/MyCalculatorWebService?Tester

## division Method invocation

**Method parameter(s)**

Type	Value
double	5.0
double	10

**Method returned**

double : "5.0"

**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/">
<S:Header>
<S:Body>
<ns2:division xmlns:ns2="http://myservice.com/">
<num1>50.0</num1>
<num2>10.0</num2>
</ns2:division>
</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/">
<S:Header>
<S:Body>
<ns2:divisionResponse xmlns:ns2="http://myservice.com/">
<return>5.0</return>
</ns2:divisionResponse>
</S:Body>
</S:Envelope>
```

Assignment-7 - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

New Project... Ctrl+Shift+N  
New File... Ctrl+N

Open Project... Ctrl+Shift+O  
Open Recent Project  
Close Project (Assignment-7)  
Close Other Projects  
Close All Projects  
Open File...  
Open Recent File

Project Groups...  
Project Properties (Assignment-7)

Import Project  
Export Project

Save Ctrl+S  
Save As...  
Save All Ctrl+Shift+S

Page Setup...  
Print... Ctrl+Alt+Shift+P  
Print to HTML...  
Exit

index.html MyCalculatorWebService.java

```
22  @WebMethod(operationName = "addition")
23  public double addition(@WebParam(name = "num1") double num1, @WebParam(name = "num2") double num2) {
24      //TODO write your implementation code here:
25      return num1 + num2;
26  }
27
28  /**
29   * Web service operation
30  */
31  @WebMethod(operationName = "subtraction")
32  public double subtraction(@WebParam(name = "num1") double num1, @WebParam(name = "num2") double num2) {
33      //TODO write your implementation code here:
34      return num1 - num2;
35  }
36
37  /**
38   * Web service operation
39  */
40  @WebMethod(operationName = "multiplication")
41  public double multiplication(@WebParam(name = "num1") double num1, @WebParam(name = "num2") double num2) {
42      //TODO write your implementation code here:
43      return num1 * num2;
44  }
45
46  /**
47   * Web service operation
48  */
49  @WebMethod(operationName = "division")
50  public double division(@WebParam(name = "num1") double num1, @WebParam(name = "num2") double num2) {
51      //TODO write your implementation code here:
52      return num1 / num2;
53  }
```

subtraction - Navigator

Members <empty>

MyCalculatorWebService

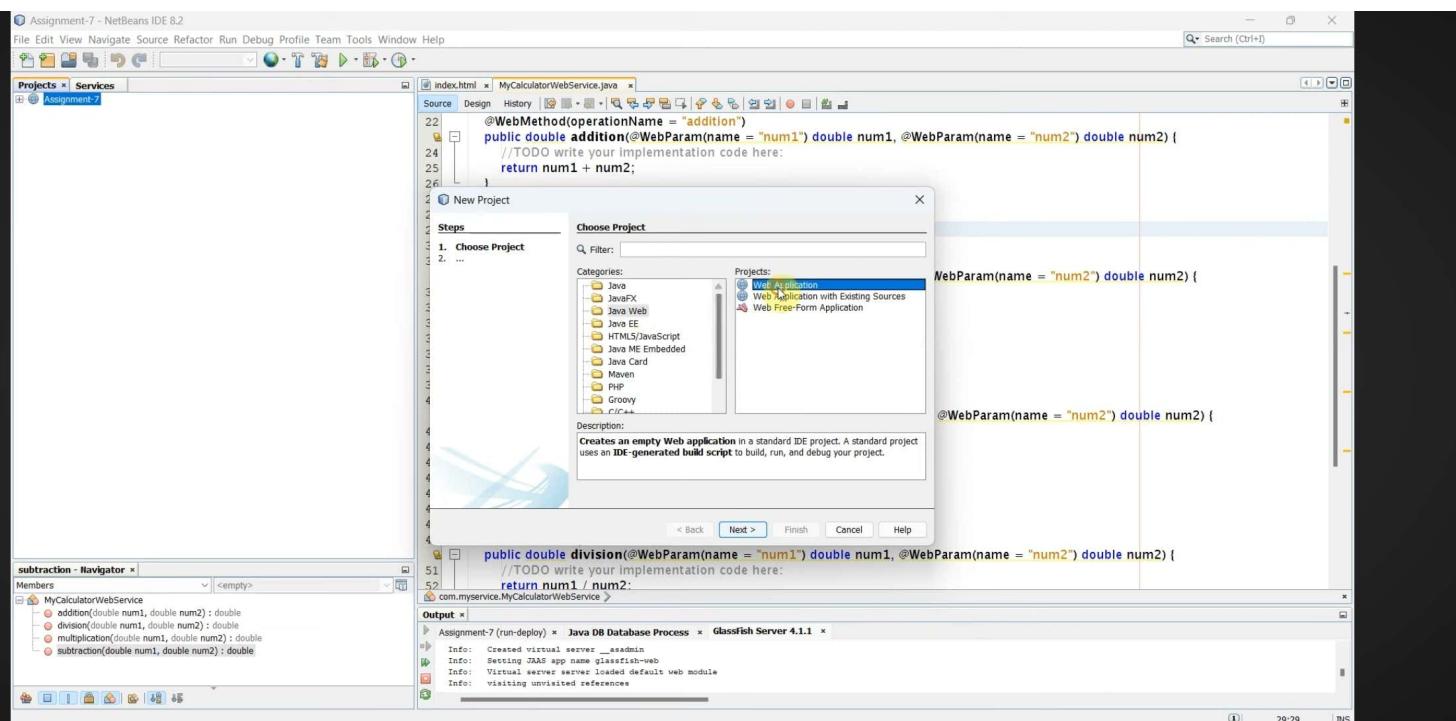
- addtion(double num1, double num2) : double
- division(double num1, double num2) : double
- multiplication(double num1, double num2) : double
- subtraction(double num1, double num2) : double

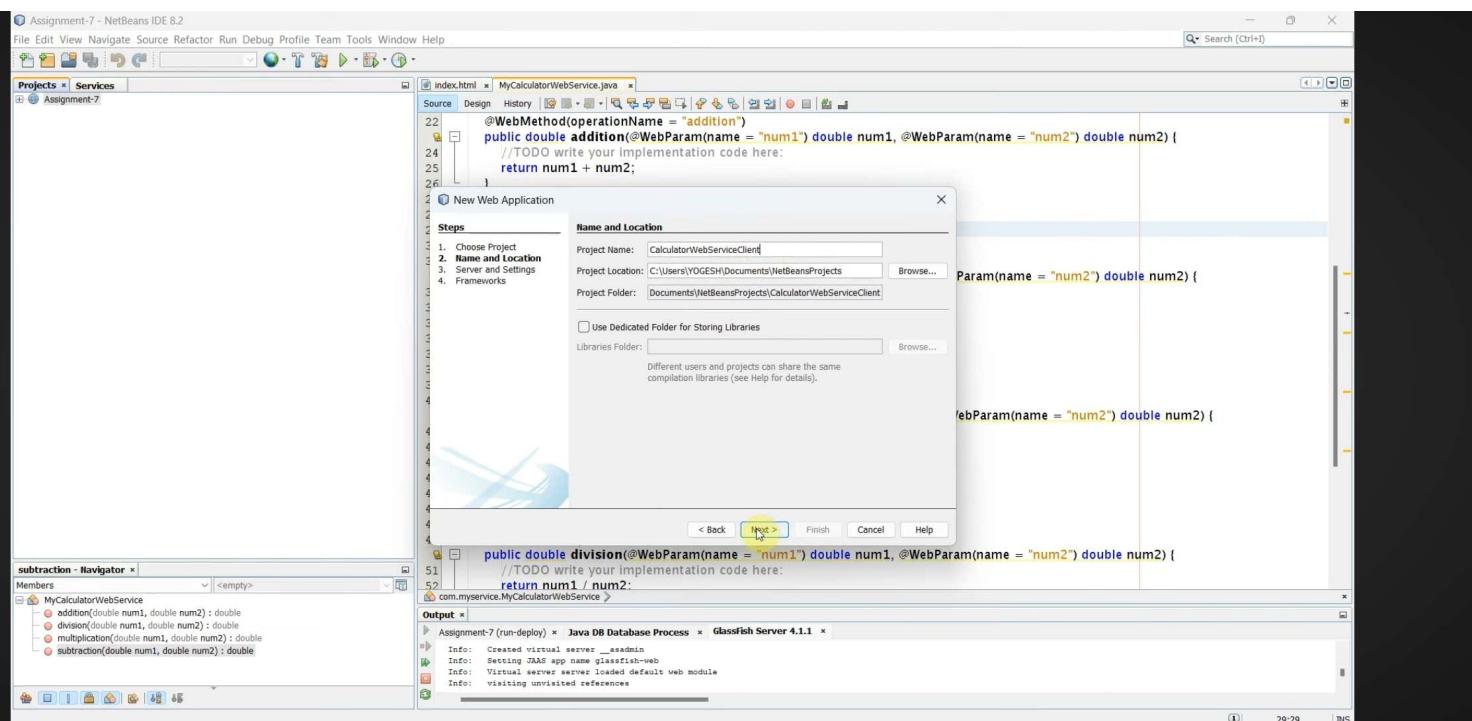
Output

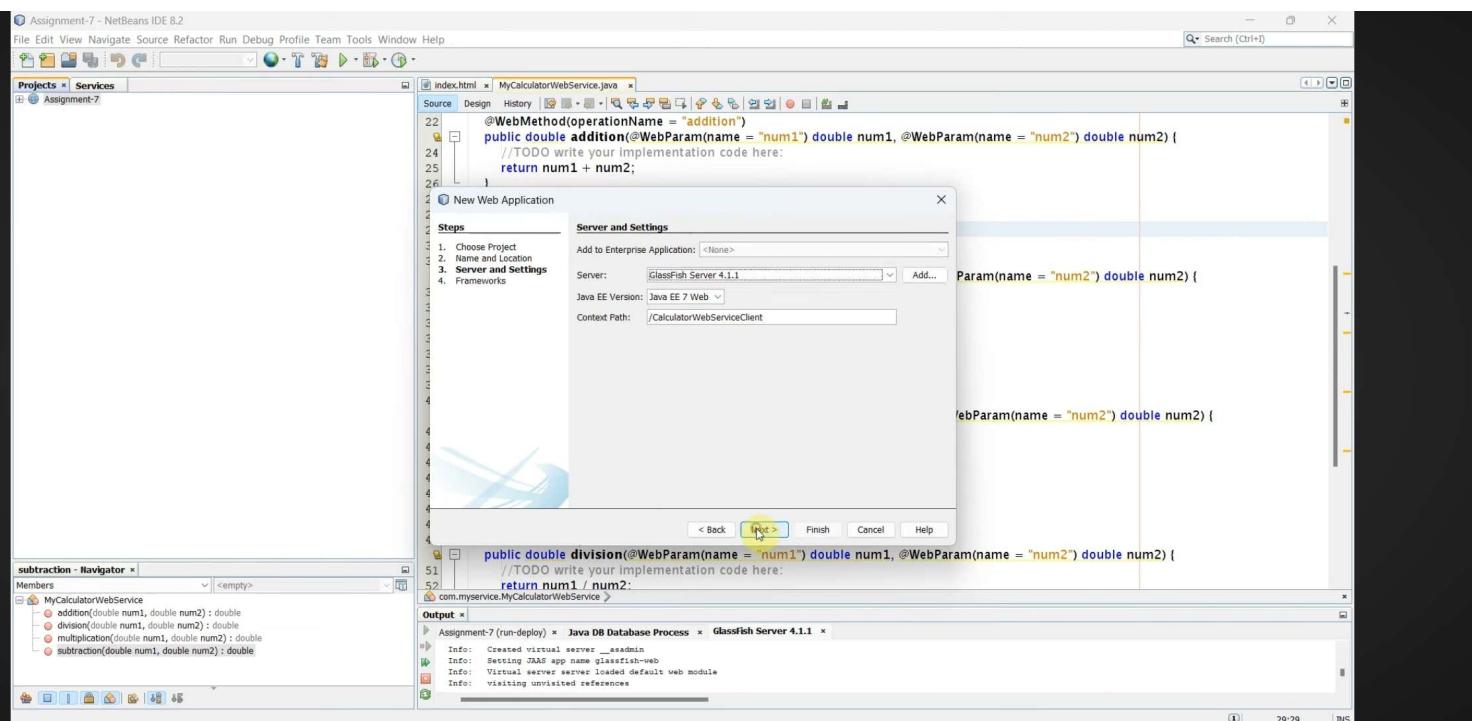
Assignment-7 (run-deploy) × Java DB Database Process × GlassFish Server 4.1.1 ×

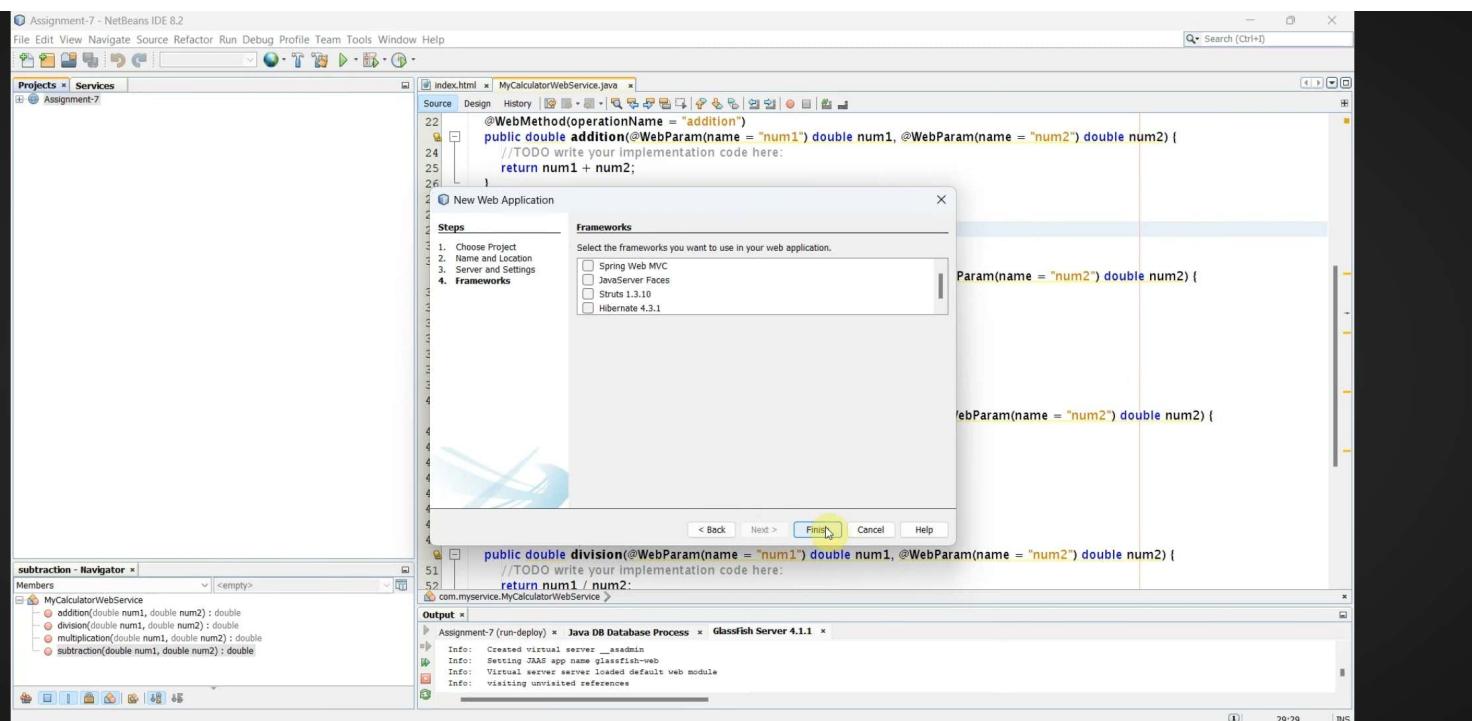
- Info: Created virtual server \_\_admin
- Info: Setting JAAS app name glassfish-web
- Info: Virtual server server loaded default web module
- Info: visiting unvisited references

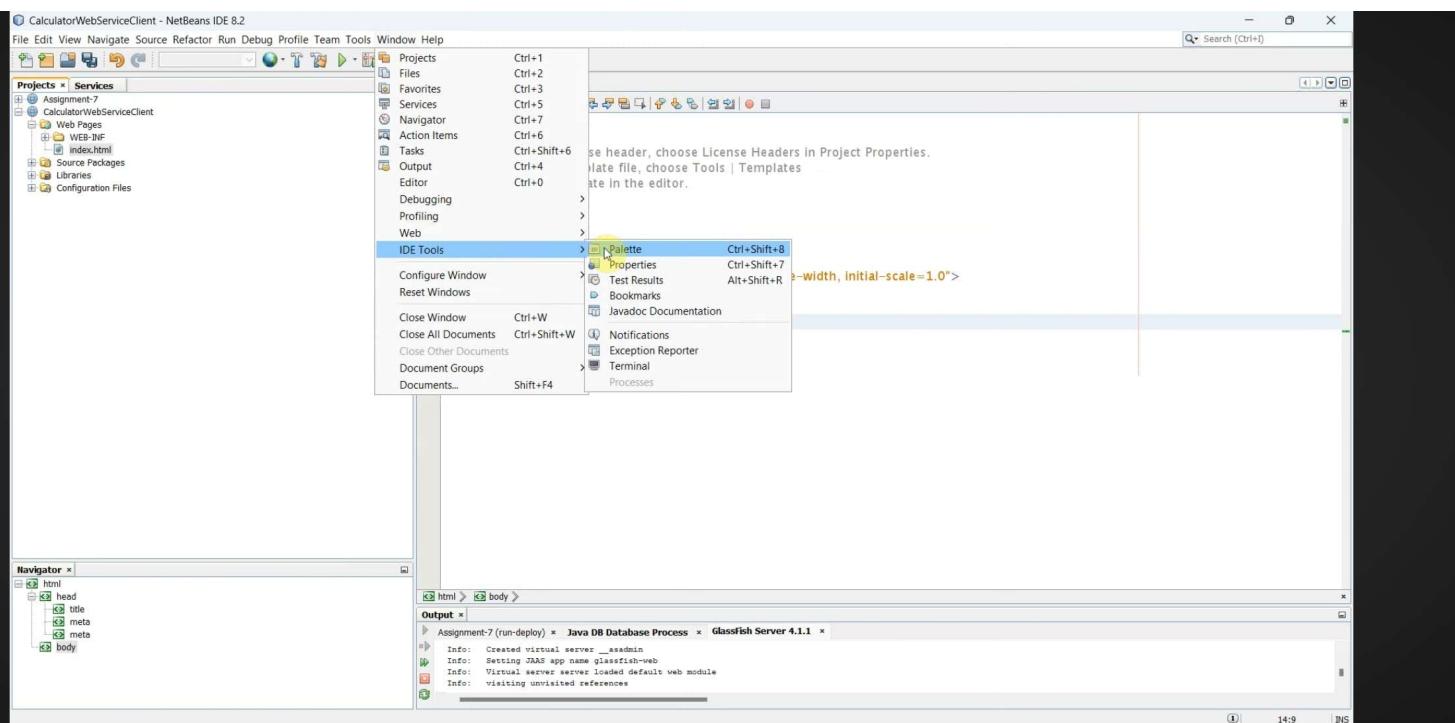
29:29 315

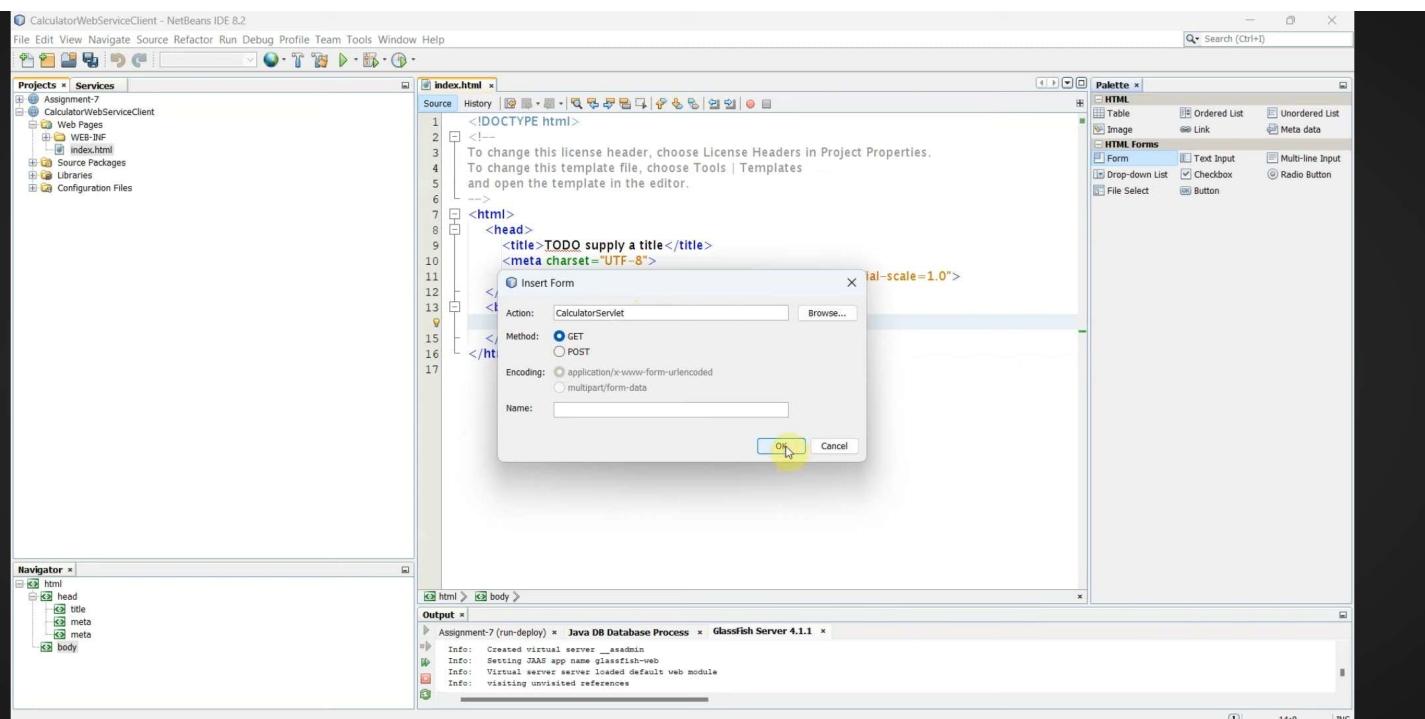


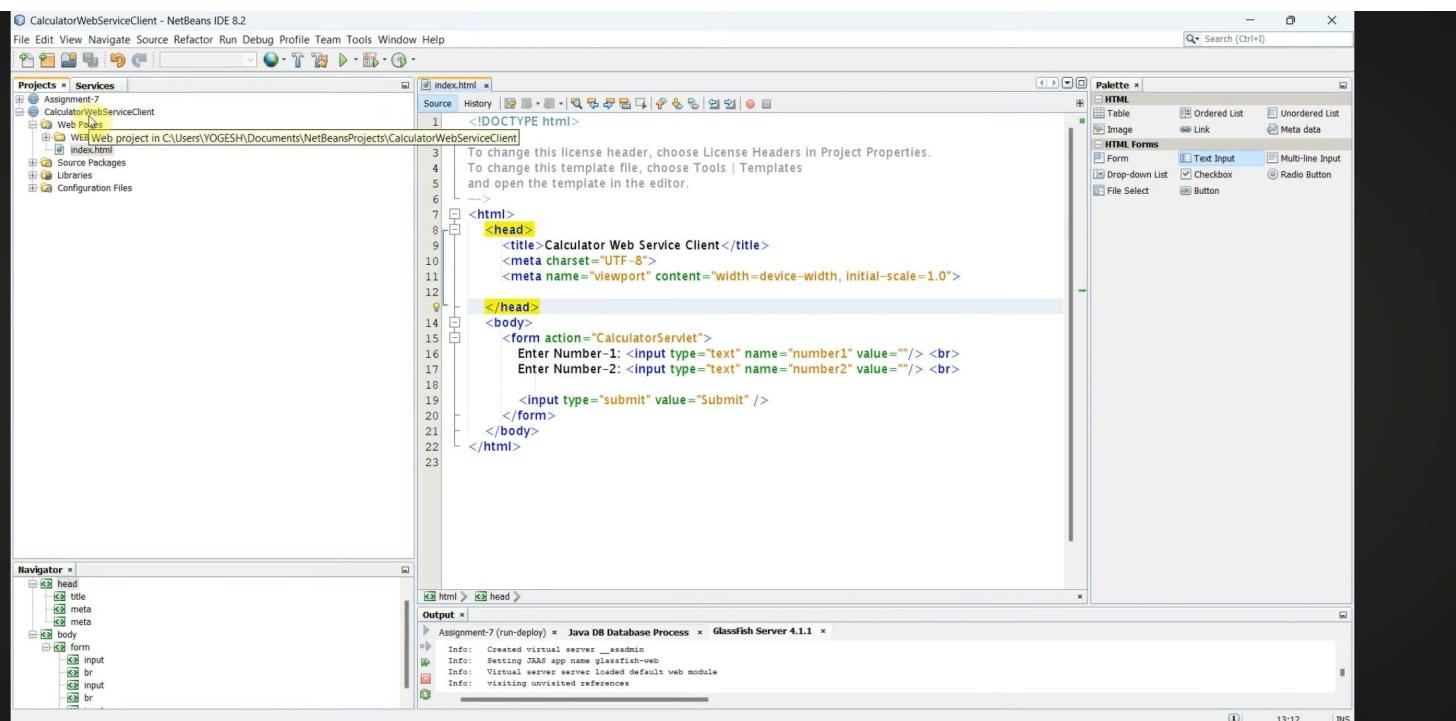


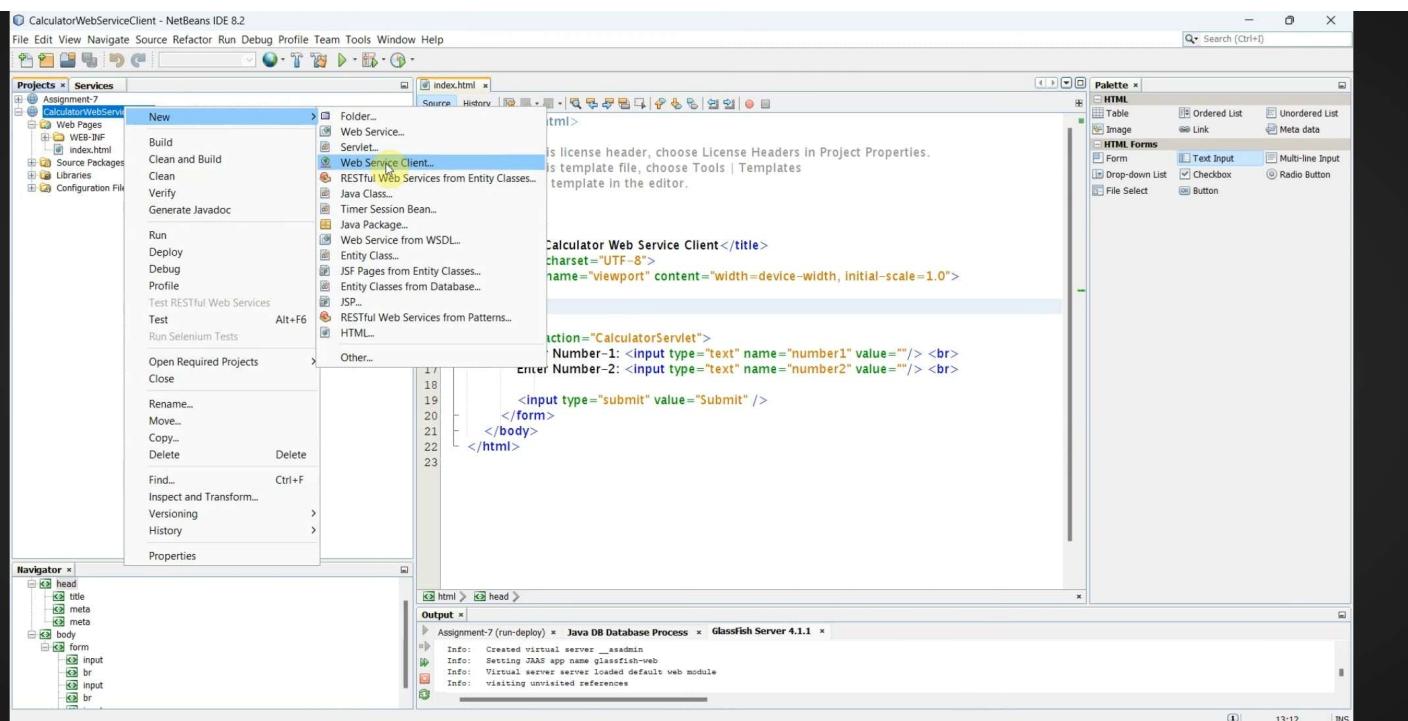


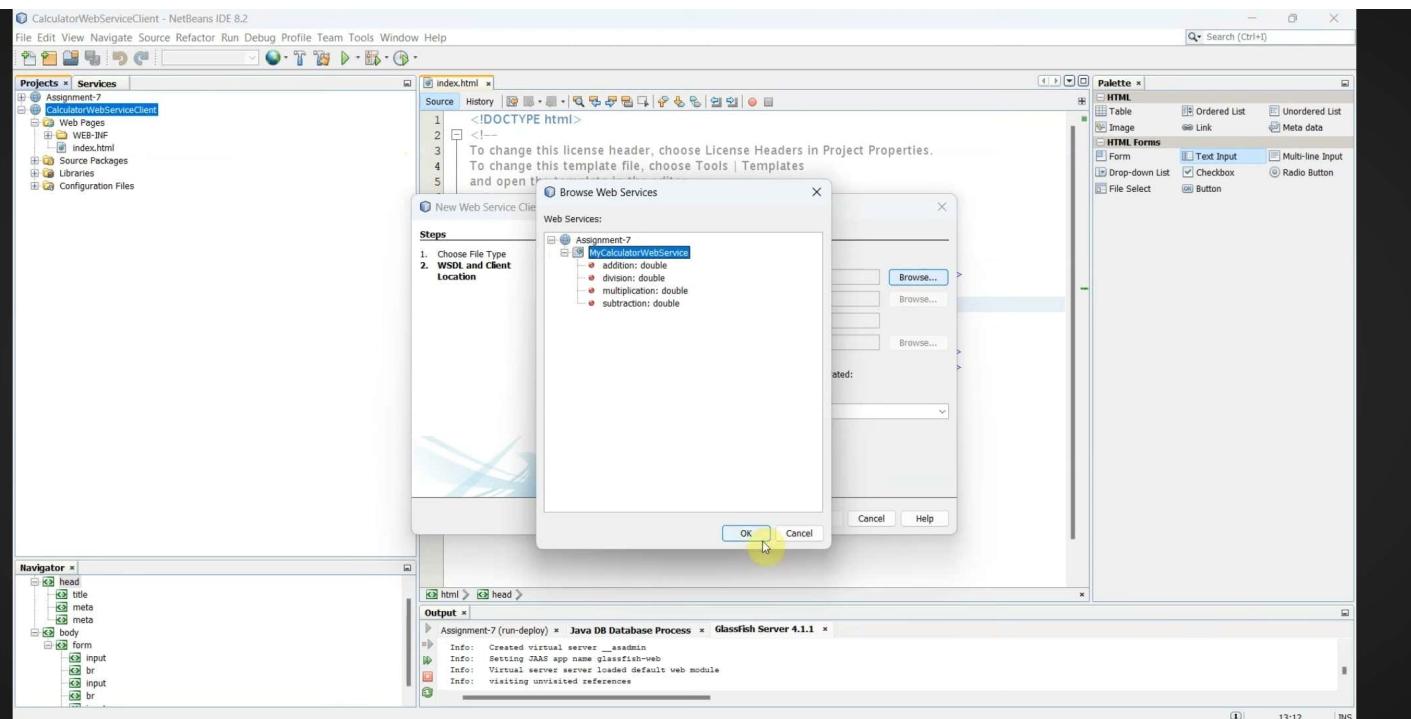


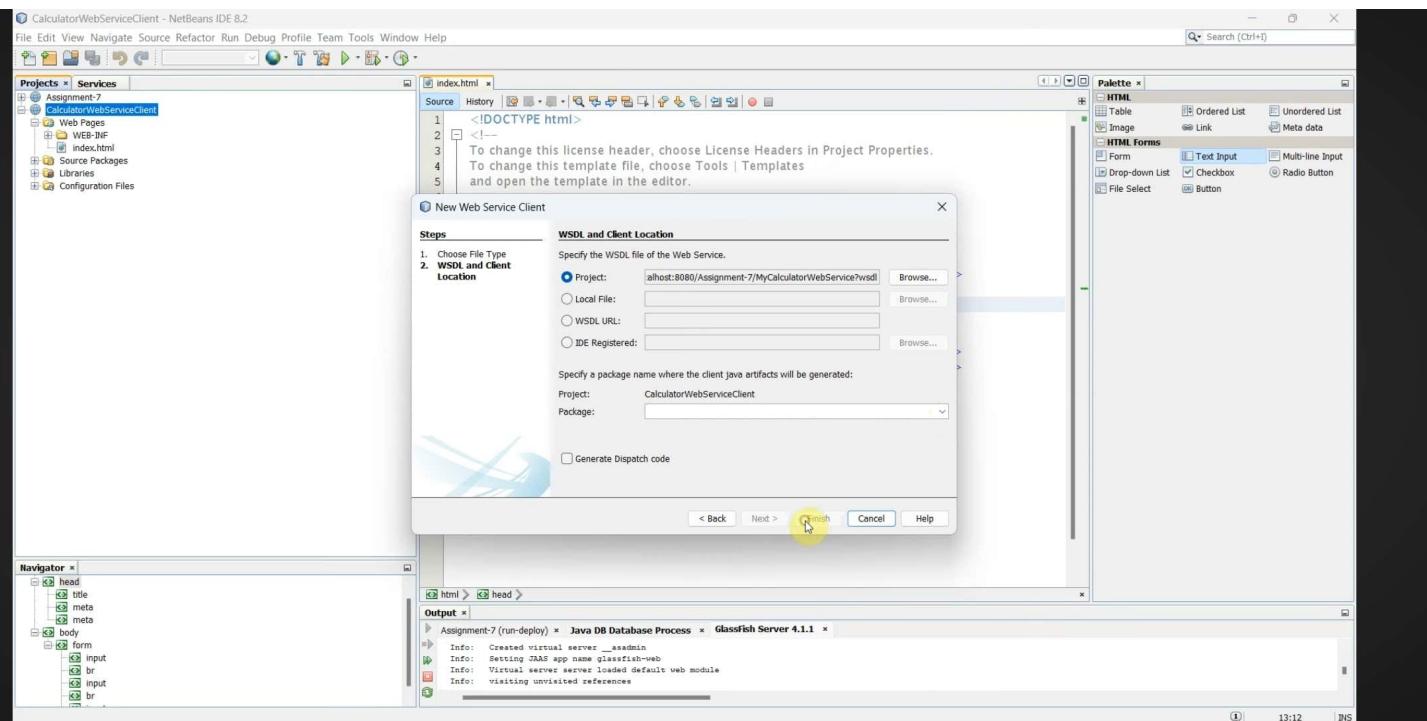


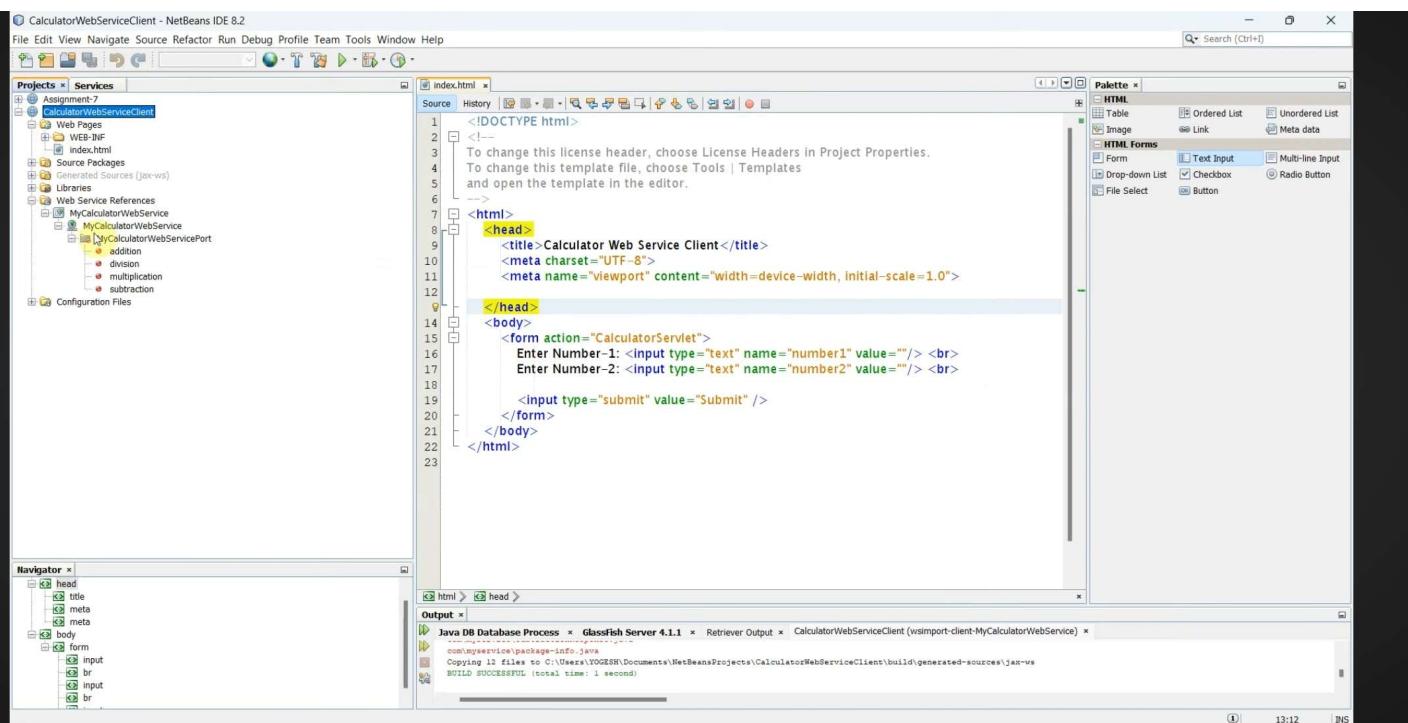


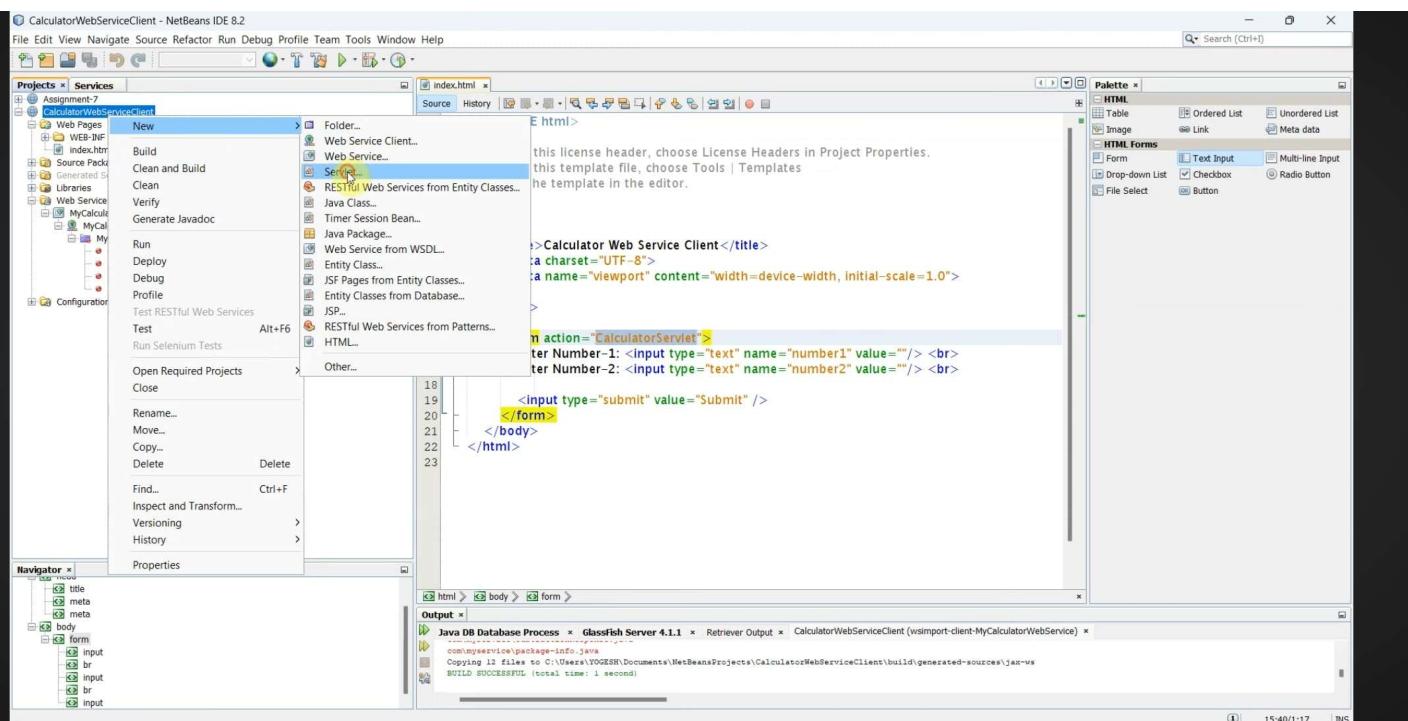


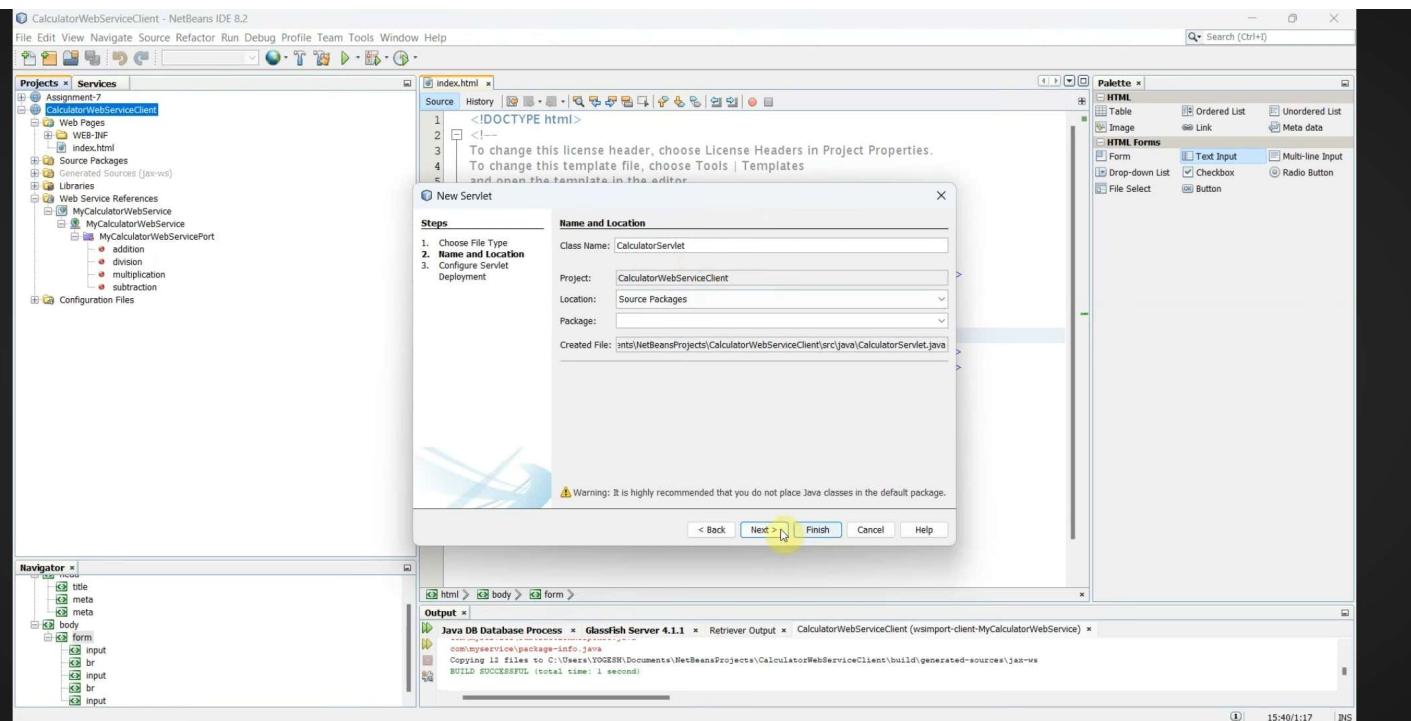


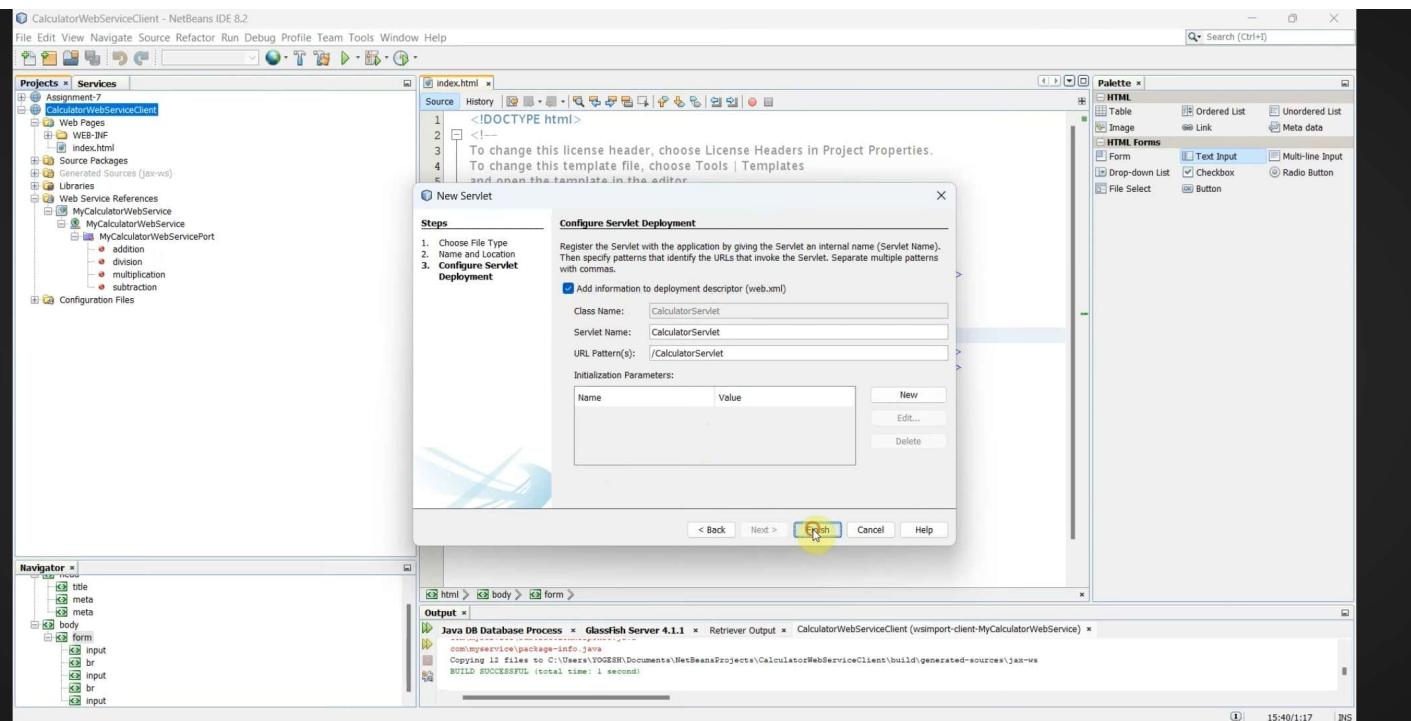


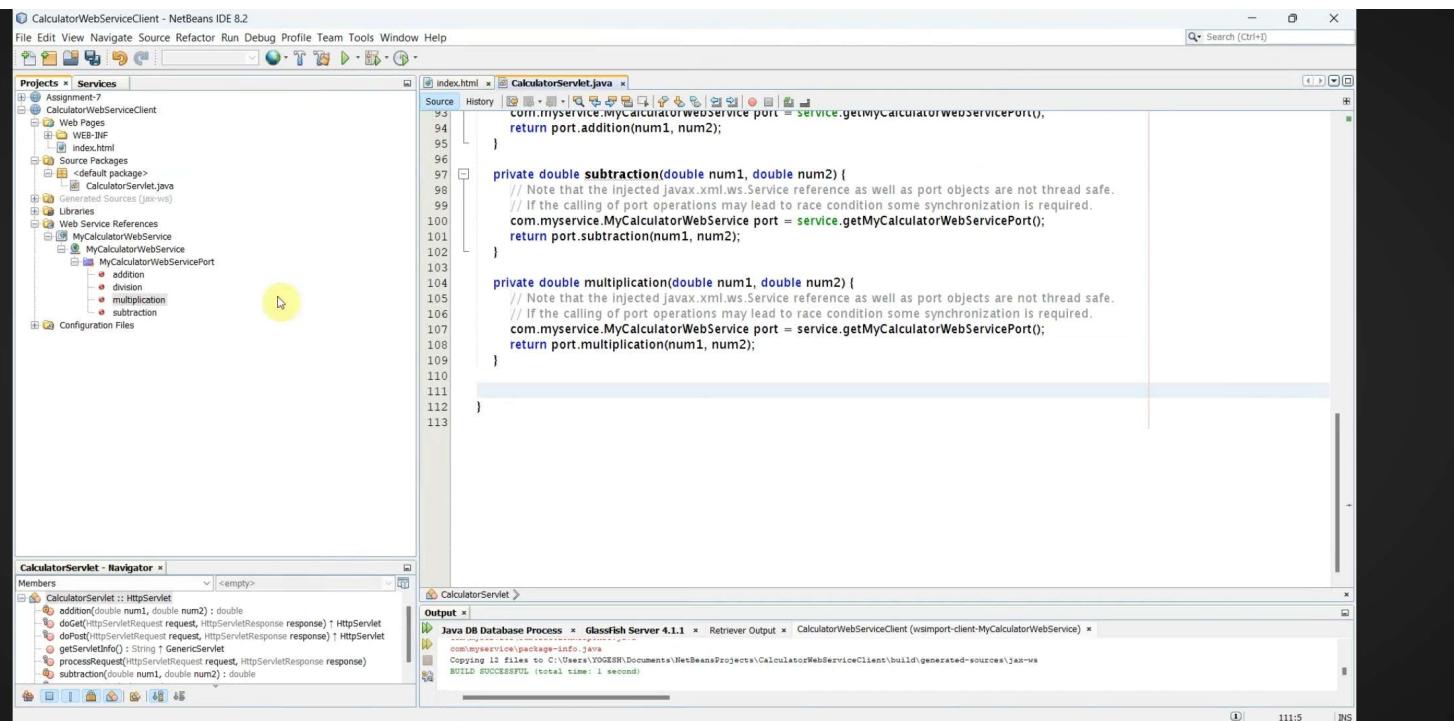












CalculatorWebServiceClient - NetBeans IDE 8.2

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Search (Ctrl+F)

Projects Services

Assignment-7

- CalculatorWebServiceClient
  - Web Pages
    - WEB-INF
      - index.html
  - Source Packages
    - default package
      - CalculatorServlet.java
  - Test Packages
  - Generated Sources (jax-ws)
  - Libraries
  - Test Libraries
  - Web Service References
    - MyCalculatorWebService
      - MyCalculatorWebService
        - division
        - multiplication
        - subtraction
  - Configuration Files

index.html    CalculatorServlet.java

```

protected void processRequest(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
        double num1, num2;
        num1 = Double.parseDouble(request.getParameter("number1"));
        num2 = Double.parseDouble(request.getParameter("number2"));
        out.println("<!DOCTYPE html>");
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Calculator Servlet Output</title>");
        out.println("</head>");
        out.println("<body>");
        out.println("<h1>Addition Is: " + addition(num1, num2) + "</h1>");
        out.println("<h1>Subtraction Is: " + subtraction(num1, num2) + "</h1>");
        out.println("<h1>Multiplication Is: " + multiplication(num1, num2) + "</h1>");
        out.println("<h1>Division Is: " + division(num1, num2) + "</h1>");
        out.println("</body>");
        out.println("</html>");
    }
}

HttpServlet methods. Click on the + sign on the left to edit the code.

private double addition(double num1, double num2) {
    // Note that the injected javax.xml.ws.Service reference as well as port objects are not thread safe.
}

```

processRequest - Navigator

Members

- addition(double num1, double num2) : double
- division(double num1, double num2) : double
- doGet(HttpServletRequest request, HttpServletResponse response) : HttpServlet
- doGet(HttpServletRequest request, HttpServletResponse response) : HttpServlet
- getServletInfo() : String
- multiplication(double num1, double num2) : double
- processRequest(HttpServletRequest request, HttpServletResponse response)

CalculatorServlet > processRequest > try

Output

Java DB Database Process x GlassFish Server 4.1.1 x Retriever Output x CalculatorWebServiceClient (wsimport-client-MyCalculatorWebService) x

com.mybservice.package-INFO.java

Copying 12 files to C:\Users\YOGESH\Documents\NetBeansProjects\CalculatorWebServiceClient\build\generated-sources\jax-ws

BUILD SUCCESSFUL (total time: 1 second)

CalculatorServlet.java saved. 47:59 315

