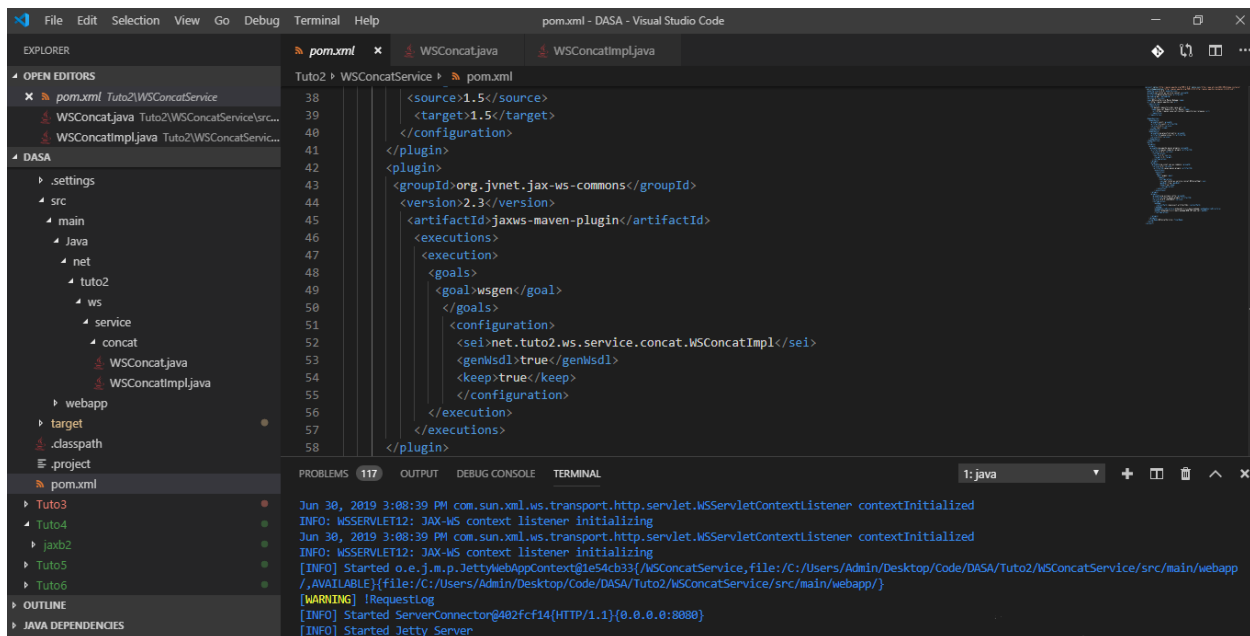


# TD 2

## Web Service Concat

### What Done

### Implemented Web Service



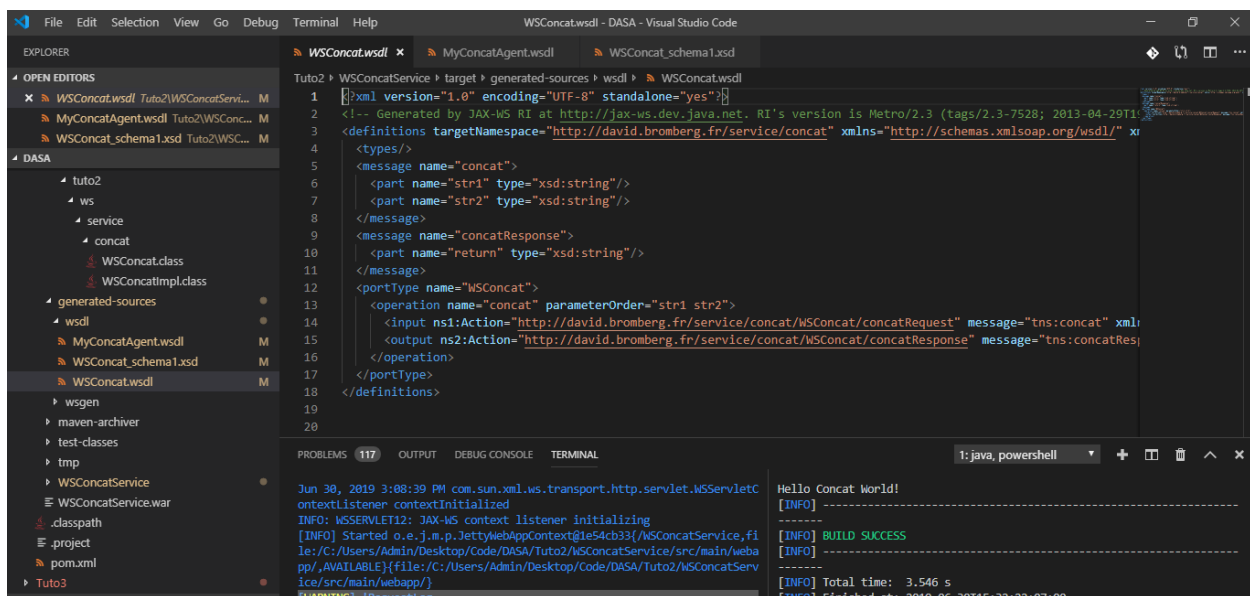
The screenshot shows the Visual Studio Code interface with the `pom.xml` file open. The file contains the following XML content:

```
<?xml version="1.5" ?>
<source>1.5</source>
<target>1.5</target>
</configuration>
</plugin>
<plugin>
  <groupId>org.jvnet.jax-ws-commons</groupId>
  <version>2.3</version>
  <artifactId>jaxws-maven-plugin</artifactId>
  <executions>
    <execution>
      <goals>
        <goal>wscon</goal>
      </goals>
      <configuration>
        <sei>net.tuto2.ws.service.concat.WSConcatImpl</sei>
        <genWSDL>true</genWSDL>
        <keep>true</keep>
      </configuration>
    </execution>
  </executions>
</plugin>
```

The terminal output shows the following logs:

```
Jun 30, 2019 3:08:39 PM com.sun.xml.ws.transport.http.servlet.WSServletContextListener contextInitialized
INFO: WSServlet12: JAX-WS context listener initializing
Jun 30, 2019 3:08:39 PM com.sun.xml.ws.transport.http.servlet.WSServletContextListener contextInitialized
INFO: WSServlet12: JAX-WS context listener initializing
[INFO] Started o.e.j.m.p.JettyWebAppContext@1e54cb33{/WSConcatService,file:/C:/Users/Admin/Desktop/Code/DASA/Tuto2/WSConcatService/src/main/webapp
/AVAILABLE}{file:/C:/Users/Admin/Desktop/Code/DASA/Tuto2/WSConcatService/src/main/webapp/}
[WARNING] !RequestLog
[INFO] Started ServerConnector@402fcf14(HTTP/1.1){0.0.0.0:8080}
[INFO] Started Jetty Server
```

### Generated WSDL files



The screenshot shows the Visual Studio Code interface with the `WSConcat.wsdl` file open. The file contains the following XML content:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<!-- Generated by JAX-WS RI at http://jax-ws.dev.java.net. RI's version is Metro/2.3 (tags/2.3-7528; 2013-04-29T14:40:29Z) -->
<definitions targetNamespace="http://david.bromberg.fr/service/concat" xmlns="http://schemas.xmlsoap.org/wsdl/" xmlns:tns="http://david.bromberg.fr/service/concat">
  <types>
    <message name="concat">
      <part name="str1" type="xsd:string"/>
      <part name="str2" type="xsd:string"/>
    </message>
    <message name="concatResponse">
      <part name="return" type="xsd:string"/>
    </message>
    <portType name="WSConcat">
      <operation name="concat" parameterOrder="str1 str2">
        <input ns1:Action="http://david.bromberg.fr/service/concat/WSConcat/concatRequest" message="tns:concat" xmlns:ns1="http://schemas.xmlsoap.org/wsdl/" />
        <output ns2:Action="http://david.bromberg.fr/service/concat/WSConcat/concatResponse" message="tns:concatResponse" xmlns:ns2="http://schemas.xmlsoap.org/wsdl/" />
      </operation>
    </portType>
  </definitions>
```

The terminal output shows the following logs:

```
Jun 30, 2019 3:08:39 PM com.sun.xml.ws.transport.http.servlet.WSServletContextListener contextInitialized
INFO: WSServlet12: JAX-WS context listener initializing
[INFO] Started o.e.j.m.p.JettyWebAppContext@1e54cb33{/WSConcatService,file:/C:/Users/Admin/Desktop/Code/DASA/Tuto2/WSConcatService/src/main/webapp
/AVAILABLE}{file:/C:/Users/Admin/Desktop/Code/DASA/Tuto2/WSConcatService/src/main/webapp/}
[WARNING] !RequestLog
[INFO] Started ServerConnector@402fcf14(HTTP/1.1){0.0.0.0:8080}
[INFO] Started Jetty Server
```

## Implemented Client:

The screenshot shows the Visual Studio Code interface with the following components:

- EXPLORER:** Displays the project structure for 'DASA'. The 'pom.xml' file is selected under the 'main' directory.
- OPEN EDITORS:** Lists open files including 'pom.xml', 'WSConcatClient', 'MyConcatAgent.java', and 'App.java'.
- Terminal:** Shows the Maven command being executed: `Tuto2 > WSConcatClient > pom.xml`.
- Code Editor:** Displays the content of 'pom.xml', which includes a Maven plugin configuration for 'jaws-maven-plugin' (version 2.3). The configuration specifies the source directory, the WSDL URL (`http://localhost:8080/WSConcatService/services/concat?wsdl`), and the package name (`net.tuto2.ws.client`).
- PROBLEMS:** Shows a warning message: `!RequestLog`.
- OUTPUT:** Displays the output of the Maven execution, including the message: `[INFO] Started o.e.j.m.p.JettyWebAppContext@1e54cb33{/WSConcatService, file:/C:/Users/Admin/Desktop/Code/DASA/Tuto2/WSConcatService/src/main/webapp/,AVAILABLE}{file:/C:/Users/Admin/Desktop/Code/DASA/Tuto2/WSConcatService/src/main/webapp/}`.

The screenshot shows the Visual Studio Code interface with the following components:

- EXPLORER:** Displays the project structure for 'DASA'. The 'WSConcatImpl.java' file is selected under the 'main' directory.
- OPEN EDITORS:** Lists open files including 'pom.xml', 'WSConcatService', 'WSConcatImpl.java', and 'App.java'.
- Terminal:** Shows the Maven command being executed: `Tuto2 > WSConcatService > src > main > Java > net > tuto2 > ws > service > concat > WSConcatImpl.java`.
- Code Editor:** Displays the content of 'WSConcatImpl.java', which implements the 'WSConcat' interface. The code includes imports for 'javax.jws' and 'javax.xml.ws', and defines the 'concat' method with two parameters (`str1` and `str2`).
- PROBLEMS:** Shows a warning message: `!RequestLog`.
- OUTPUT:** Displays the output of the Maven execution, including the message: `[INFO] Started o.e.j.m.p.JettyWebAppContext@1e54cb33{/WSConcatService, file:/C:/Users/Admin/Desktop/Code/DASA/Tuto2/WSConcatService/src/main/webapp/,AVAILABLE}{file:/C:/Users/Admin/Desktop/Code/DASA/Tuto2/WSConcatService/src/main/webapp/}`.

## What Working

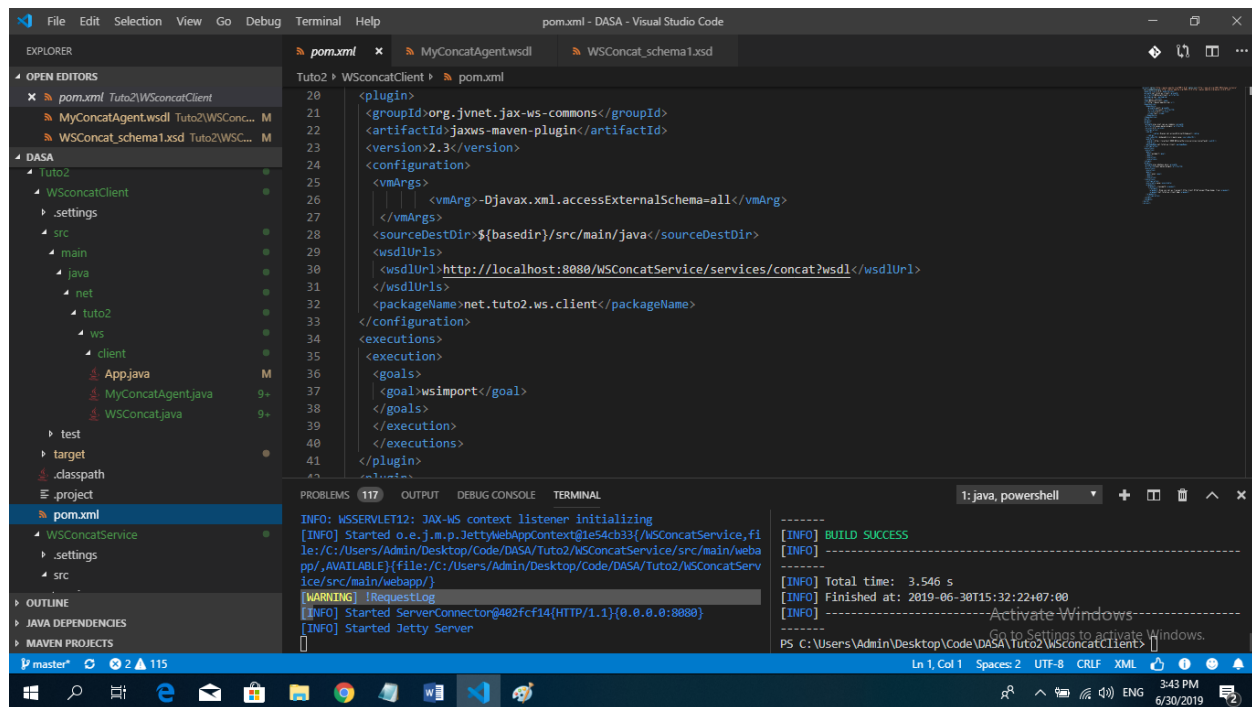
The above steps are working.

Received Output : Hello Concat World! Via run: mvn exec:exec of Client.

## What Not Working

In Client, Plugin jaxws-maven-plugin was not working as in the Tutorial.

Took a lot of time to debug.



## How it works

From Server side, it generated wsdl files and run the service.

From Client side, it read the wsdl via service and generated Classes.

The App can use the generated classes as local class and the framework will do the sending and getting the message from remoted functions which is on the server.