Calculator test Project: **TestCalc**

This deployed by using as Maven web project arch type, all the required jar entries, entered in the pom.xml.

To see the output by directly importing TestCalc into eclipse as a maven project and run it on Apache Tomcat server, Once successfully deployed into the server, we can access the calculator UI with the below link.

<http://localhost:8081/TestCalc/>

Port 8081: I have changed the Tomcat port to 8081.

Index.jsp:

Having all the UI logic ( showing icons and calling the controller services based on the user request).

CalculatorController.java:

This is the controller class which is an exposed list of rest services as to UI.

Calculate: This will give the calculated response of the given input.

PUT: <http://localhost:8081/TestCalc/rest/calculate>

Request Body:

{

"firstNumber": "4",

"secondNumber": "15",

"operator": "ADD"

}

Response:

{

"**value**"**:** "19"

}

Calculate Previous: This will return the previously calculated response.

GET: [http://localhost:8081/TestCalc/rest/getPreviousResult](http://localhost:8081/TestCalc/rest/calculatePrev)

Response:

{

"**value**"**:** "19"

}

Clear Memory: Which will clear the previous value and current input value.

GET: <http://localhost:8081/TestCalc/rest/clearMemory>

{

"**value**"**:** "0"

}

CalculatorService.java

**public** **double** calculate(**final** String first number, **final** String second number, **final** String operator)

This method will do the calculation based on input and operand return result value.

**public** **double** getPreviousValue()

This method will return the previously calculated value.

**public** **void** clearMemory()

This method allows the user to clear the memory.

TestCalculatorService.java:

Test class having test methods of all the basic operations of the calculator.