Exercise 3a

Creating a WSDL-first service

Prior Knowledge

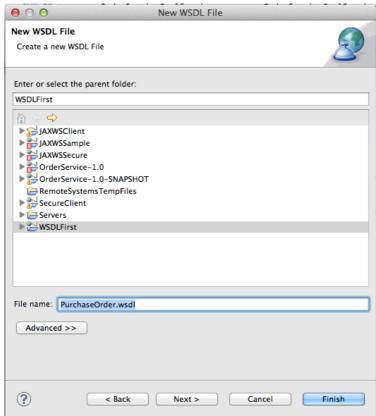
Understand WSDL and Schema

Objectives

Learn how to model services contract first and then implement.

Software Requirements

- Java Development Kit 7
- Eclipse JEE
- 1. In Eclipse create a new Dynamic Web Project
- 2. Create a WSDL file using File->New->Other->Web Services->WSDL Call it PurchaseOrder.wsdl

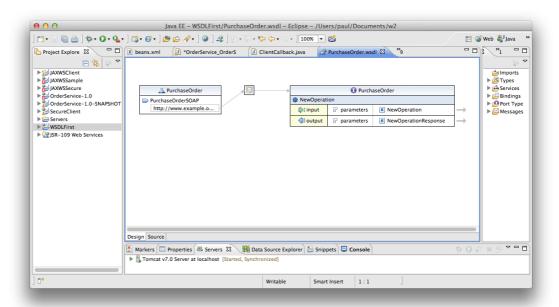


3. Click Next>

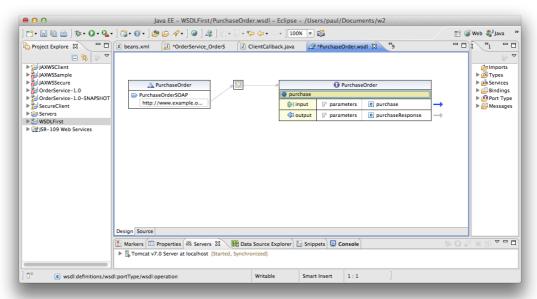
Make sure it is Doc/Lit, and create the skeleton.



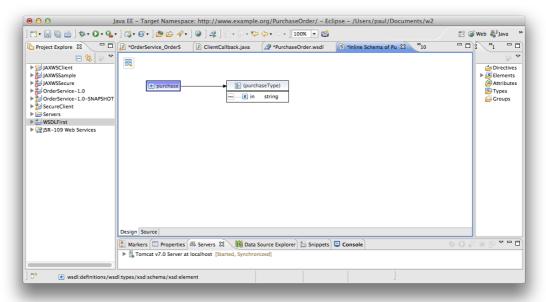
4. Switch to Design View



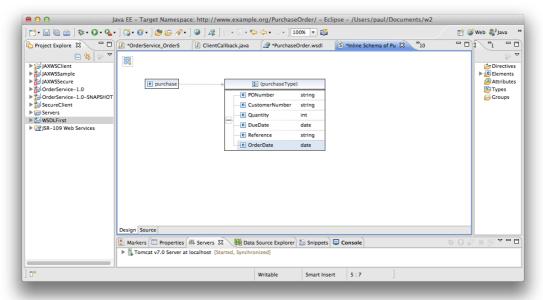
5. Now edit the Operation name to be purchase



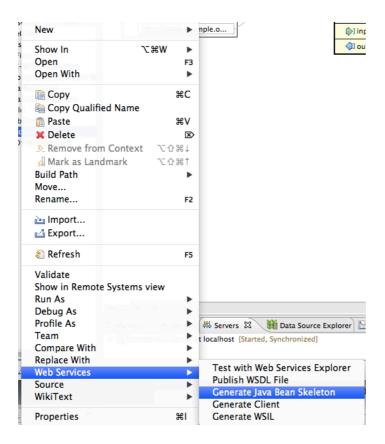
- 6. Now click on the \rightarrow next to purchase
- 7. You will see some XML Schema



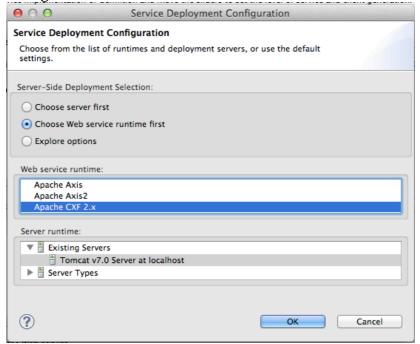
8. Replace the default single element that makes up the Purchase type with some useful elements. You should end up with something like:



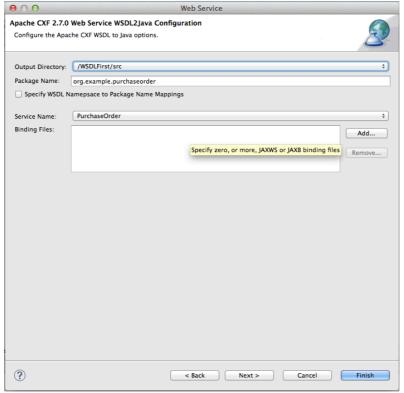
- 9. Save the schema (Ctrl-S)
- 10. Navigate back and do the same to make an intelligent response.
- 11. Right click on your WSDL file and select Validate. Check it all looks nice.
- 12. If you really want to, add some further operations, and schemas.
- 13. Now let's create some code. Right-click on your WSDL and select Web-Services->Generate Java Bean Skeleton.



14. Change the runtime to be CXF:



15. Click Next> and then make sure the Service Name is selected properly



16. Click Next> and review the options. I suggest you check the same ones as shown below:



17. Click Next>

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- 18. Don't do any UDDI stuff! Click Finish.
- 19. The server has generated a nice implementation for you.
- 20. To find the WSDL, you need to either use the WSDD stuff (which we will cover later!). Alternatively you need to put together the project name into a URL like this:

http://localhost:8080/YourProjectNameGoesHere/services

- 21. Replace/Improve the logic in PurchaseOrderImpl with your logic. Run the service and test it with SOAPUI.
- 22. Extension: Find a WSDL on the internet and see if you can implement a clone.