Java Web services Hands on assignments

1. Define a web service interface ‘Stock’ containing two abstract methods as ‘public Boolean updateStock (String stockName, double price) and public double getStockPrice (String stockName) with implementation class as ‘StockExchange’ with annotations. Build the web service deploy in tomcat web server. Define a static stub client to invoke above two methods on the web service and display the results. Use HashMap to store stockName and price values in side the StockExchange’ programs. Run the client program and monitor the soap messages with tcp monitor program.
2. For the above assignment list the different parts of wsdl document and xsd schema and analyze them.
3. For the above web service define a Proxy client and Dynamic Dispatch client programs to invoke the web services and display the result.
4. For the above web service in 1, define a servlet client and jsp client to invoke the web service. Pass the required parameters from html pages.
5. In the wsdl of web service of program 1 above add one more operation definition to remove the existing stock entries and use it as stock.wsdl in current assignment. Generate java components from this wsdl and define implementation class ‘StockUpdate’.Define client program to invioke all three operations on the web service and print the result.
6. In the program of first assignment above, modify the ‘getStockPrice’ to throw ‘StockException’ if the stock specified not found in the current list. Define the client to generate this exception by passing non-existing stock name. Deploy and run the programs.
7. Define a class ‘Person’ Java Bean class having private variables as id, name and grade as double type. Define public get/set methods for these variables. Define service class ‘Society’ with annotations and methods as ‘Person getPerson (int id) ‘ and ‘boolean UpdatePerson(Person obj, int id)’ which uses Person objects as method parameter and return values. Check the xsd schema generated and analyze the schema for person element.
8. Define the above service with Soap Binding style as Document style and deploy the service and test it.
9. For the above ‘Stock’ web service define a message Logging handler and Soap blocking handler to log the message and bypass the calls in case client passes unauthorized share names. Read these values in the handler.
10. Define a web service which accepts non-xml data files as attachments and use it to exchange the files in the network.

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