Rapport de Stage.

Supervisor M.Schaaff:

Note: Impotant please read fully:

Current position:

This report will give a general outline as to my current position and to what I have done in the last two weeks S2 and S3. I have had mixed success in the past two weeks firstly I began by experimenting with Ksoap and I successfully wrote my own version of HelloWorld (voir appendix 1) to interact with one I had previously written this eventually I got workkng after many many trials and errors. After learning from this I was quickly able to create a client to call on the Sesame cds webservice the results can be seen in Appendix 2.

This sadly took more time than initially envisaged so again I regret to say that I'am some what behind but i believe that it's come along way and I deeply regret that did not come to you sooner to ask for more help. Last week I was severly behind and too embaressed to ask for assistance I'm glad that i was able to work out a lot of the problem myself.

I feel that although these constitute a major personal sucess I feel there is a major descrepencie in what was asked for i.e

- (i) Specify the target service Sesame at the client level
- (ii) Send a request to the SOAP serveur and find how to do this in Ksoap
- (iii) It must be able to recieve the response from the serveur and print this to the screen

I do feel that this has been mainly accomplished although there must be some descrepencie in our way of thinking. I feel we need to act fast to rectify this immediately I need you to help me clearly understand your way of thinking.

This needs to be addressed immediately.

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What I've done in the last two weeks:

First of all the resources availabe to reserch K-soap are deplorable they merely refer back to the creators site Enhydra http://ksoap.enhydra.org/. On this site I down loaded both Ksoap and Kxml and I added these to my class libraries as needed. The enhydra site has three examples which all uses K-soap but these examples alos require the need for J2me and use MIDlet technology desite this I downloaded J2me hoping to run these examples and learn from how they worked as to how they used Ksoap and how I good convert the sesame webservice in a similar way.

I downloaded all three examples CashConv, StockQuoteDemo and AirportWeather each one compiled correctly but each one failed in exactly the same way. This code is quite old and contained several well documented bugs and several cahnages had to be made before it even complied propely.

Project "AirportWeather" loaded
Project settings saved
Building "AirportWeather"
Build complete
Running with storage root DefaultColorPhone

Where after the soap message was sent it crashed Warning: To avoid potential deadlock, operations that may block, such as networking, should be performed in a different thread than the commandAction() handler.

All three examples on the site crashed in exactly the same way. Despite asking other experts on several Java forums no body could offer an explanation as to why this was happeneing.

Then I decide to try and run these examples on jBuilder this time converting them so that they would not use the j2me only it's libraries and and simply convert any use of .setText and display methods as simple System.out .println commands.

Here I ran into two major problems the first although it may sound absurd to an experienced programmer caused me lots of problems and wasted lots of time. I needed to use several J2me libraries but I simply could not find the .zip file in which they were stored to add to my class path I again took to java forums to ask other developers and e-mailed experts who look after queries on behalf of Sun Microsysyems as to where the WTK2.0 folder could be housed in the end it was disscovered in " file:/" i took exhaustive searching to find the folder here in such an obscure location.

From this I added the various jar's needed and began to run the three enhydra programs. Each of which all failed yet again each time with a similar error

Error:

java.lang.NullPointerException

Not giving up from this dissapointment I continued to search and I found another example on the web

from a developer who was having problems and posted his code on the net I copied this and tried to run it again it returned a similar response

http://ksoap.enhydra.org/project/mailingLists/ksoap/msg00608.html

Creating request object Invoking...

Error: java.lang.NullPointerException

I the wrote my own Helloword program and tried to run this on JBuilder I searched exhaustively on the web and NO where No where could I find even a simple HelloWorld example on a different site http://www.capescience.com/articles/wireless/StockClient.java I found a similar but slightly different version of StockQuoteDemo which i tried to run on J2me with the same error and on Java Sun's site I found the same program .

I did find one HelloWorld version which interacted with a text document using PHP I did not see any point in trying to get to grips with php or downloading any more software pointlessly so I analysed the code it was using trying to learn from this and together with the ping example.

I came up with the my prelimenary version of HelloWorld which would call the HelloWorld webservice previously deployed and tested in axis

When it ran it successfully gots as far as String result = transport.call(request).toString();

Where it crashes with the following Error message.

Creating request object Result: calling SOAP method

Invoking....

Error: java.lang.NullPointerException

I then asked a java forum for help who instructed me to use ksoap-j2se.zip instead of ksoap-midp.zip and use the TransportSE calss instead of the Transport class. After some tinkiling with the code It eventally ran an returned a correct answer. (See Appendix One)

From this I had to learn how to add a parameter to a request in order that I could send a request to the Sesame web service. The results of which can be seen in Appendix 2.

Conclusion:

I'am incredible sorry that I did not come to you sooner and tell you of all the problems I was having I realise again that much precious time as been unnessecarily lost and i sincerely regret this. I would like you to analyse what I have done so far and tell me exactly where this differs from your interpretation. Time is the essence and we must act fast to clarify any confusion

I realise that our time again has been wasted my only come back on this is that for My holidays I will be retuning to Ireland where I will be able to use my colleges computers and i will continuue to work there and perhaps in a different environement I could make greater progress than here.

But at this stage I really need to work very closely with you and make much more progress from now on I will be asking question on a daily basis and I hope you will help me in any way possible.

IMPORTANT

I do not understand the following " Il faut être capable d'interpréter le résultat (SOAP -> il faut pouvoir les informations utiles)

Please could this be clarified immediately I think I need help in this area.

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Damien Cummins

APPENDIX ONE

```
import org.ksoap.SoapObject;
import org.ksoap.*;
import org.ksoap.ClassMap;
import org.ksoap.transport.HttpTransportSE;
class Moyen
 static final String serviceNamespace ="http://localhost:8080/axis/HelloWorld.jws";
   public static void main(String args []) throws Exception
    String resultStr = "Result: ";
    HttpTransportSE transport = new HttpTransportSE(serviceNamespace, "getHelloWorld");
    transport.debug =true;
    try{
     System.out.println("Creating request object");
     SoapObject request = new SoapObject (serviceNamespace, "getHelloWorld");
     ClassMap classMap = new ClassMap(true);
     transport.setClassMap (classMap);
     resultStr += "calling SOAP method";
     System.out.println(resultStr);
     System.out.println("Invoking....");
     String result = transport.call(request).toString();
     System.out.println(result);
     System.out.println(resultStr);
     resultStr +=result;
     System.out.println("Result: "+resultStr);
     catch (Exception e) {
       System.out.println("Error: "+e.toString());
 }//main
Creating request object
Result: calling SOAP method
Invokina....
HelloWorld
Result: calling SOAP method
Result: Result: calling SOAP method HelloWorld
```

APPENDIX TWO

```
import org.ksoap.SoapObject;
import org.ksoap.*;
import org.ksoap.ClassMap;
import org.ksoap.transport.HttpTransportSE;
```

```
class SesameK
 static final String serviceNamespace ="http://cdsws.u-strasbg.fr/axis/Sesame.jws";
   public static void main(String args []) throws Exception
    String resultStr = "Result: ";
    HttpTransportSE transport = new HttpTransportSE(serviceNamespace, "Sesame");
    transport.debug =true;
    try{
     System.out.println("Creating request object");
     SoapObject request = new SoapObject (serviceNamespace, "Sesame");
     request.addProperty ("Sesame","M 51");
     ClassMap classMap = new ClassMap(true);
     transport.setClassMap (classMap);
     resultStr += "calling SOAP method";
      System.out.println(resultStr);
     System.out.println("Invoking....");
     String result = transport.call(request).toString();
     System.out.println(result);
     System.out.println(resultStr);
     resultStr +=result;
      System.out.println("Result: "+resultStr);
     catch (Exception e) {
       System.out.println("Error: "+e.toString());
 }//main
}
```

Result of Appendix Two.

Creating request object Result: calling SOAP method Invoking.... # M 51 #Q00044 #=SIMBAD: 1 %J 202.4682083 +47.1946667 (6) = 13 29 52.37 +47 11 40.8 %J.E [10800.00 10800.00 90] D 1999ApJS..125..409C %I.0 APG 85 %C IG %@ 8056,0 #---ServerTime(ms): 18 Result: calling SOAP method Result: Result: calling SOAP method# M 51 #Q00044 #=SIMBAD: 1 %J 202.4682083 +47.1946667 (6) = 132952.37 +471140.8%J.E [10800.00 10800.00 90] D 1999ApJS..125..409C %I.0 APG 85

%C IG %@ 8056,0

#---ServerTime(ms): 18