

Component-Based Software Engineering	Exercise Sheet No. 6
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Web Services

Task 1: Web Services

A web services server is running on 141.76.65.198:9009.

1a)

Open your browser and point it to

<http://141.76.65.198:9009/WebServices-WebServices-jar/CarManagement?wsdl>. Study the resulting WSDL file and extract the service's interface from it.

1b)

Open a telnet connection to 141.76.65.198:9009 and send a HTTP-encoded SOAP message to invoke the operation you identified above. Pass an arbitrary string of your choice as a parameter. What is the result? What does the service do?

Task 2: Examining Web Services 1

The jExam project provides web service access to all public information in jExam. In this exercise, you are going to inspect some of that data. Download and unzip the axis2 framework (<http://ws.apache.org/axis2/>). For this exercise you only need the client parts of the framework, so no installation of an application server is required. All you need to do is to make the jar files in the distribution available to your programs.

2a)

Read and understand the jExam WSDL at

<http://jexam.inf.tu-dresden.de:9009/WebServiceJBoss/JExamWebServiceBean?wsdl> .

2b)

Use axis2 and its `wsdl2java` tool to create a stub for the latest version of the jExam web service via `wsdl2java.sh -p de.tudresden.st.cbse.jexam2 -uri JExamWebServiceBean.wsdl` Use the generated stub to obtain information on all courses offered by the ST group (abbreviated 'SWT' in

jExam) in the current semester. Print out a list with information on each course and the staff member responsible for it.

Task 3: Examining Web Services 2

The discogs project at <http://discogs.com> provides web service access to all public information in discogs. In this exercise, you are going to inspect some of that data.

3a)

Read and understand the Python client for the current web service at https://github.com/discogs/discogs-python-client/blob/master/discogs_client.py

How does this web service differ from the jExam one? Which methods are provided via api.discogs.com, how are those methods called and in which format are results passed to the client?

3b)

Use the web service to list all releases of the label *Pampa Germany* and provide a detailed view (including track data) of *Robag Wruhme's* latest album *Thora Vukk*.