Webservices Mini-Test

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a)Request-Line has the Structure: 'Method SP Request-URI SP HTTP-Version CRLF'

b) GET HTTP 1.1 \r\n Host: 192.168.1.1:8080 \r\n Connection: close \r\n\r\n

c)

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a) Client: The client creates a socket by instantiating it with IP-Address and Port and uses it to open and close a connection to the server.

Server: TCPListener listens for incoming data and reacts according to a predefined scheme.

b) Reading from the input-stream results in a blocking behavior. This means that the thread will not continue until the method reads a FIN flag or an EOF.

Writing to the OutputStream usually does not block, but if you write to the server-buffer so fast that the buffer is overloaded, the call will block.

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a) Wrong. REST is not a protocol but is a software architectural style to design distributed systems.

b) Wrong. What is described is stateful. Stateless means that the serves does not store client-context.

c) Right.

d) Wrong. JSON can be a data representation of REST but HTML and XML are allowed as well.

4 WS-\* Services

a)The 'Webservice Description Language' (WSDL)-File Defines a Webservice. In case of SunSPOTWebservice the WSDL is stored at

'http://vslab.inf.ethz.ch:8080/SunSPOTWebServices/SunSPOTWebservice?wsdl'

b)The typedefinitions are imported form schema at 'http://vslab.inf.ethz.ch:8080/SunSPOTWebServices/SunSPOTWebservice?xsd=1' where

'getSpotResponse' is further defined as type 'sunSpot' which eventually consists of:

3 Strings, 2 Switches (String and Boolean), 1 Tilt (3 Doubles).

'getSpot' consists of a String.

c) We would use the binding-tag, to bind a porttype to the SMTP-protocol. The SMTP-protocol would be represented by a URI which links to it. The service-address would not have to be changed.

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a)127.0.0.1 (or localhost)

b) To the emulated device itself. It is its own loopback-interface.

c)10.0.2.2

d) With the input/output readers.