Webservices - Soap/rest

Soap UI – tool to test soap and rest

**SoapUI- testsuite-testcase-assertions-create report**

**soapuipro:**

we can send request params using form which is more easy than xml, json when u have large fields

Response->outline feature where u can directly add assertions by right click on any field.

To assert response-cleck add assertion-propertycontent- xpath match(declare)- we have option to select node to assert directly and get xpath value-give expected result

Assert for element existence by right click element

Other tools : ITCO Lisa, jmeter(we can use for ws testimg but cant create), also thru coding injava

What to test:

Functional testing- operations, end point(server at which webservice is running) testing - as we may have diff servers for diff clients like whitebox and walmart for paypal, also uat,sit,prod servers,Dependency testing, state based testing – diff outputs/messages for diff inputs

LoadTesting – how many concurrent requests can be sent

Security testing – mailicious requests,sql sent thru req etc..

Any automation – excel document with testcases- approved by mgr – then start automation - iff poss ahow one example

Test strategy –testplan, tools, members reqd for autmn, manual

TLC:

Testcases in excel,jira,rally,QC; testdata-develelopers,Db,xcel,web logs ; execution ;

How to test:

Blacbox

Grey box-

White box- unit testing

**What to test in webservices?**

**http status code** - Delete- status code -204-no content, after delete –get, 404- not found

Post-400-bad request

Post- created success-201

Post-same resource creation again-conflict/duplicate – 409

Get—200ok

response correctness – data fields, data type, data order, fullness

no soap fault,schema compliance, existence of certain elements,count,associated value of certain elements, ,response timeout, negative cases(validate status by giving incorrect location, incorrect sensor value), parsing json xpaths(jackson json lib) to assert nodes

httpclient - response.getentity(HttpEntity)- get contentlength, content type, headers – for location etc..

yesterday we did smoke testing

400 bad req- remove xml end tage n show

No input-500

soap internally uses java-soapui projs r java based projects-save automated suite - .xml if mid of proj, new proj - wsdl

request-below- headers, auth,attachements

**xquery**

**groovy script- script assertion**

data driven-new test step- properties

create prop.properties on desktop with key:value for rquest elements or directly from soapui toolcan add new teststep-property transfer

**how to do more than one set of data?**

Add grooovy script

Delay teststep

Db teststep

Download ojdbc14 to soapui-lib folder-retsrrt soapui

Manual test step- loan request-loan processed - send mail

**Dependency testing – run testcase**

**Condition goto**

http request – functional testing

mock service- right click on project – create mock service

**rest project- basic request, template**

load, security testing