

# Testing SOAP Web Services

Software Testing



# [ Agenda ]

- Webservices - retrospective
- Testing SOAP web services
- Working with XML



# [ SOAP web services ]

- XML format request/response
- WSDL - an XML-based language for describing Web services and how to access them
  - WSDL stands for Web Services Description Language
  - WSDL is an XML document
  - WSDL is used to describe Web Services
- Example of WSDL
- Most popular testing tool - SoapUI



# [ What is XML? ]

- XML stands for e**X**tensible **M**arkup **L**anguage
- XML is a markup language much like HTML
- XML was designed to carry data, not to display data (i.e. meta language)
- XML tags are not predefined. You must define your own tags
- XML is designed to be self-descriptive
- XML is a [W3C](#) Recommendation



# [ What is XML used for? ]

- open standard providing the means to share data and information between computers and computer programs as unambiguously as possible. XML data is stored in plain text format
- XML is used in many aspects of web development
- JavaScript code + external XML file = dynamic data in your HTML document. No need to change HTML every time.
- New Internet languages are created with XML – XHTML, WSDL, RSS



```
<?xml version="1.0" encoding="UTF-8"?>
<breakfast_menu>
  <food>
    <name>Belgian Waffles</name>
    <price>$5.95</price>
    <description>Our famous Belgian Waffles with plenty of real maple
syrup</description>
    <calories>650</calories>
  </food>
  <food>
    <name>Homestyle Breakfast</name>
    <price>$6.95</price>
    <description>Two eggs, bacon or sausage, toast, and our ever-popular hash
browns</description>
    <calories>950</calories>
  </food>
</breakfast_menu>
```



# SoapUI

# [ References ]

- [XML Tutorial](#)
- [Web Service tutorial](#)





