soapUI 2-Day Training Class Topics

• Service Testing Best Practices
  ○ Thoroughly test your services
  ○ Test using large amounts of realistic data
  ○ Make sure your services are secure
  ○ Get the most productivity from your developers and testers
  ○ Fully track your test results
  ○ Test your services under realistic loads
  ○ Make sure you govern your services

• soapUI architecture
  ○ Major components
  ○ Comparing soapUI with soapUI Pro
  ○ soapUI test structure and terminology
  ○ Choosing optimal settings and preferences
  ○ soapUI user interface
  ○ Optimal soapUI workflow
  ○ Project structure
  ○ Properties
  ○ Security tests
  ○ Events
  ○ Quiz

• Interfaces, Operations, Requests
  ○ Interface-level properties
  ○ Setting security options
  ○ Navigating, documenting, and exporting WSDL
  ○ Operation-level properties
  ○ Request structure
  ○ Request-level properties
  ○ Validating request inputs
  ○ Creating multiple requests
  ○ Response structure
  ○ Response-level properties
  ○ Working with endpoints
  ○ Quiz

• TestSteps
  ○ Protocol-oriented TestSteps
    ▪ Test Request
    ▪ Mock Response
    ▪ JDBC Request
    ▪ AMF Request
    ▪ REST Test Request
    ▪ HTTP Test Request
  ○ Flow control-oriented TestSteps
    ▪ Properties
    ▪ Property transfer
- Conditional Goto
- Delay
- Run Test Case
- Groovy script
- Manual
  - Data-oriented Test Steps
    - DataSource
    - DataSource Loop
    - DataSink
    - DataGen
  - Quiz
  - Lab

- Assertions
  - SOAP/non-SOAP
  - CONTAINS/Not CONTAINS
  - SOAP fault/non-SOAP fault
  - Response SLA
  - XPath/XQuery match
  - Script
  - Security status
  - Addressing status
  - JMS status and timeouts
  - Quiz
  - Lab

- Requirements
  - Project-level requirements
  - TestCase-level requirements
  - Importing requirements
  - Exporting requirements
  - Linking to an external requirements system

- Data-driven tests
  - Types of DataSource
  - Feeding a test with data
  - Associating assertions with data-driven tests
  - Writing test results

- Functional tests
  - Unit vs. functional tests
  - Common Test Steps
  - Complete end-to-end testing
  - Case study

- Mock services
  - Generating mock services
  - Configuring properties and scripts
  - Setting mock responses
  - Invoking mock services

- Load testing
  - Functional
  - Behavioral
• Performance
  • Requirements-driven
  • Introduction to loadUI

• The Groovy programming language
  • Language overview
  • Flow control
  • The soapUI object model
  • Dynamic test management

• Refactoring
  • Messages
  • Operations
  • XPath expressions

• Test coverage
  • Configuring measurements
  • Determining basic TestSuite coverage
  • Determining assertion coverage

• Web service interoperability
  • Basic profile
  • Identifying and correcting problems

• Monitoring
  • SOAP traffic
  • TCP/IP traffic

• Reporting
  • JUnit
  • Data export
  • Jasper

• Final exam

The format of the class is 25% lecture, 75% hands-on lab work. Each student is required to have access to a computer for the hands-on lab sessions. All necessary software will be provided prior to class.