

# **Test Driven Development II - Advanced - Exercises**

## 02 - Complex Asserts - 02 - Rules

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During this hands-on session of the Test Driven Development II - Advanced tutorial we will examine TestScripts that show the use of Rules and the Touchstone Rules Engine.

\*TestScripts for this exercise are in the FHIR3-0-1-DevDays17/TDD-2-Advanced/02-ComplexAsserts Test Definitions

#### **Test Scenario**

The use case for this test scenario involves two steps:

- 1. Create a new Patient resource instance using a known, static fixture
- 2. Read the created Patient using the summary=true option

The success outcome is that the returned Patient instance only contains the FHIR indicated summary elements.

### TDD-2-Adv-02-Complex-02-rules-patient-read-summary-[xxx]

Create a new Patient resource fixture in the setup section and then read the created Patient using the \_summary=true option.

#### **Features**

- Uses the setup section to initialize the FHIR system under test by creating the Patient resource instance needed for the subsequent read test; examine and become familiar with the TestScript
- ❖ Defines the referenced rule; observe that there are no rule parameters why?
- Examine the various read operation asserts that test the returned Patient contents; specifically, the assert that calls the defined rule

The focus of this test is to illustrate the use of Rules and the Touchstone Rules Engine to simplify the TestScript assert definitions; i.e. reduce and consolidate the number of individual asserts.



## **Key Concept: Touchstone Rules Engine and Rule Language Support**

- > Touchstone Rules Engine has access to the complete executed operation context
- Current scripting languages supported are Groovy, Schematron and XSLT
  - Groovy is the recommended language
  - Schematron and XSLT are only valid for XML formatted content
- The Touchstone Test Definitions UI provides a filter mechanism that allows the user access to uploaded rule definitions

Have fun, and remember to ask questions if you need help!