

Exercise 03-03 - Using Diagnostics

Instructions

We're going to validate the input document `input.xml`:

```
<things-and-artifacts>
  <thing name="thing 1" type="normal"/>
  <thing name="thing 2" type="special"/>
  <thing name="thing 3" type="special"/>
  <thing name="thing 4" type="vintage"/>
  <artifact name="artifact 1" type="martian"/>
  <artifact name="artifact 2" type="zorkian"/>
  <artifact name="artifact 3" type="venusian"/>
</things-and-artifacts>
```

The rules for this are:

- Things must have a type normal or special
- Artifacts must have a type martian or zorkian

A basic schenna that checks this is in `schema.sch`:

```
<schema xmlns="http://purl.oclc.org/dsdl/schematron" queryBinding="xslt3">

  <pattern>
    <rule context="thing">
      <assert test="(@type eq 'normal') or (@type eq 'special')">Invalid type on <value-
of select="@name"/>: <value-of select="@type"/></assert>
    </rule>
  </pattern>

  <pattern>
    <rule context="artifact">
      <assert test="(@type eq 'martian') or (@type eq 'zorkian')">Invalid type on <value-
of select="@name"/>: <value-of select="@type"/></assert>
    </rule>
  </pattern>

</schema>
```

Please break out the reused message in a diagnostic.

As an extra, add the following diagnostics:

- For things: Things must be normal or special
- For artifacts: Artifacts must be martian or zorkian

Make the rules that check the things and artifacts now issue two messages: The generic one that was already defined *and* the appropriate specific one you just added.

Use the template document `schema.sch` as a starting point. In oXygen, the input document `input.xml` automatically uses `schema.sch` for validation.