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26. Oktober 2009

RelaxNG

Grundlagen

Basismuster

- element
- attribute
- text

Gruppierungen

- choice (|)
- group (,)
- interleave (&)

Quantifizierer

- zeroOrMore (*)
- oneOrMore (+)
- optional (?)

Benannte Muster

- grammar
- define
- ref

Beispiel

```
<?xml version="1.0" encoding="UTF-8"?>
<element xmlns="http://relaxng.org/ns/structure/1.0"
  name="garage">
  <zeroOrMore>
    <element name="car">
      <attribute name="id"/>
      <element name="make">
        <text/>
      </element>
      <element name="year">
        <text/>
      </element>
      <optional>
        <element name="color">
          <text/>
        </element>
      </optional>
    </element>
  </zeroOrMore>
</element>
```

```
<?xml version="1.0" encoding="UTF-8"?>
<garage>
  <car id="1">
    <make>BMW</make>
    <year>1984</year>
  </car>
  <car id="2">
    <make>Ferrari</make>
    <year>2001</year>
    <color>red</color>
  </car>
  <car id="3">
    <make>Renault</make>
    <year>1973</year>
  </car>
</garage>
```

Beispiel mit Definitionen

```
<?xml version="1.0" encoding="UTF-8"?>
<grammar xmlns="http://relaxng.org/ns/structure/1.0">
  <start>
    <ref name="garage-def"/>
  </start>

  <define name="garage-def">
    <element name="garage">
      <zeroOrMore>
        <ref name="car-def"/>
      </zeroOrMore>
    </element>
  </define>

  <define name="car-def">
    <element name="car">
      <attribute name="id"/>
      <element name="make">
        <text/>
      </element>
      <element name="year">
        <text/>
      </element>
      <optional>
        <element name="color">
          <text/>
        </element>
      </optional>
    </element>
  </define>
</grammar>
```

```
<?xml version="1.0" encoding="UTF-8"?>
<garage>

  <car id="1">
    <make>BMW</make>
    <year>1984</year>
  </car>

  <car id="2">
    <make>Ferrari</make>
    <year>2001</year>
    <color>red</color>
  </car>

  <car id="3">
    <make>Renault</make>
    <year>1973</year>
  </car>

</garage>
```

Beispiel mit kompakter Syntax

```
start =
  garage-def

garage-def =
  element garage {
    car-def*
  }

car-def =
  element car {
    attribute id { text },
    element make { text },
    element year { text },
    element color { text }?
  }
```

```
<?xml version="1.0" encoding="UTF-8"?>
<garage>

  <car id="1">
    <make>BMW</make>
    <year>1984</year>
  </car>

  <car id="2">
    <make>Ferrari</make>
    <year>2001</year>
    <color>red</color>
  </car>

  <car id="3">
    <make>Renault</make>
    <year>1973</year>
  </car>

</garage>
```