



Introduction to TEI and XML

Encoding:

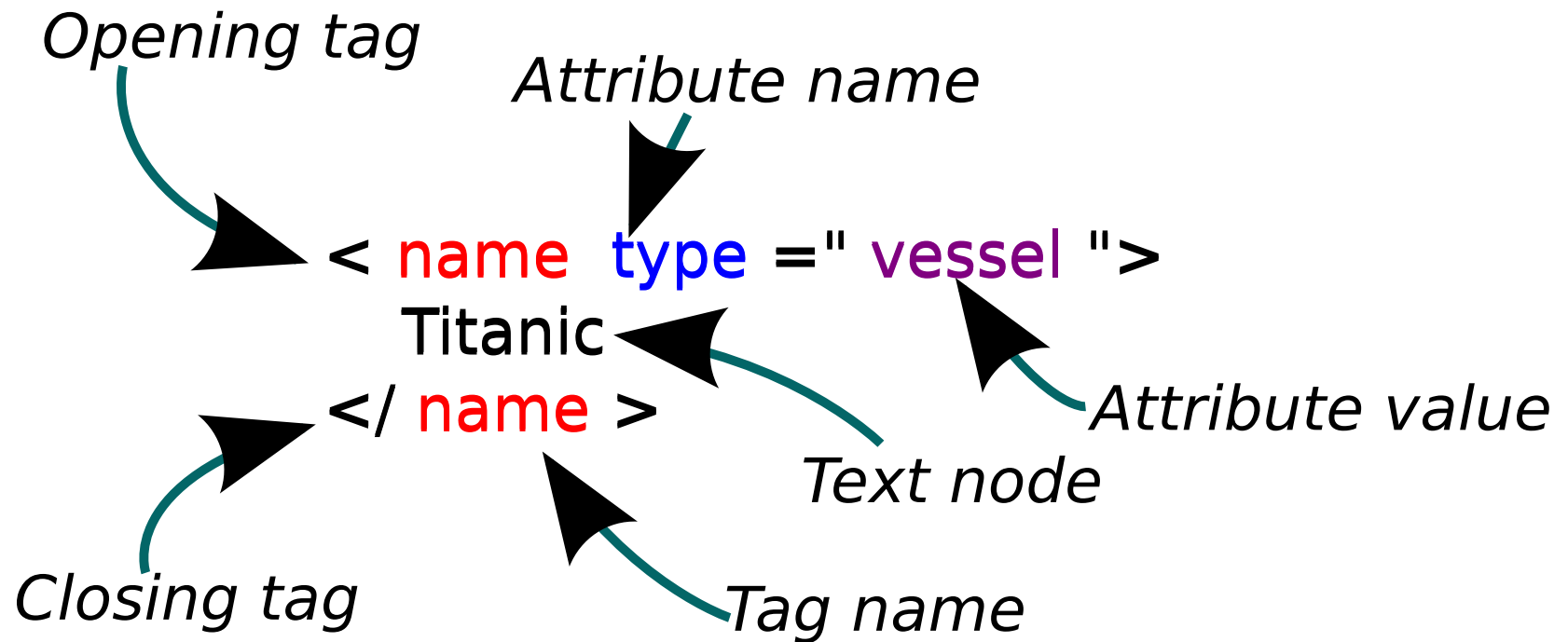
Creating XML files

XML elements

`<p>`His name is `<name>`Fred`</name>`.`</p>`

- Opening tag: `<p>`
- Closing tag: `</p>`

XML elements, attributes and text nodes



Creating an XML file in Oxygen

- File / New / XML Document / Create.
- This gives a file consisting of:

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

- Now add this:

```
<human period="stone-age">  
  <name>Fred Flintstone</name>  
</human>
```

Check well-formedness

- Document / Validate / Check Well-Formedness
- What do you see at the bottom?
- Now add a second human, after Fred:

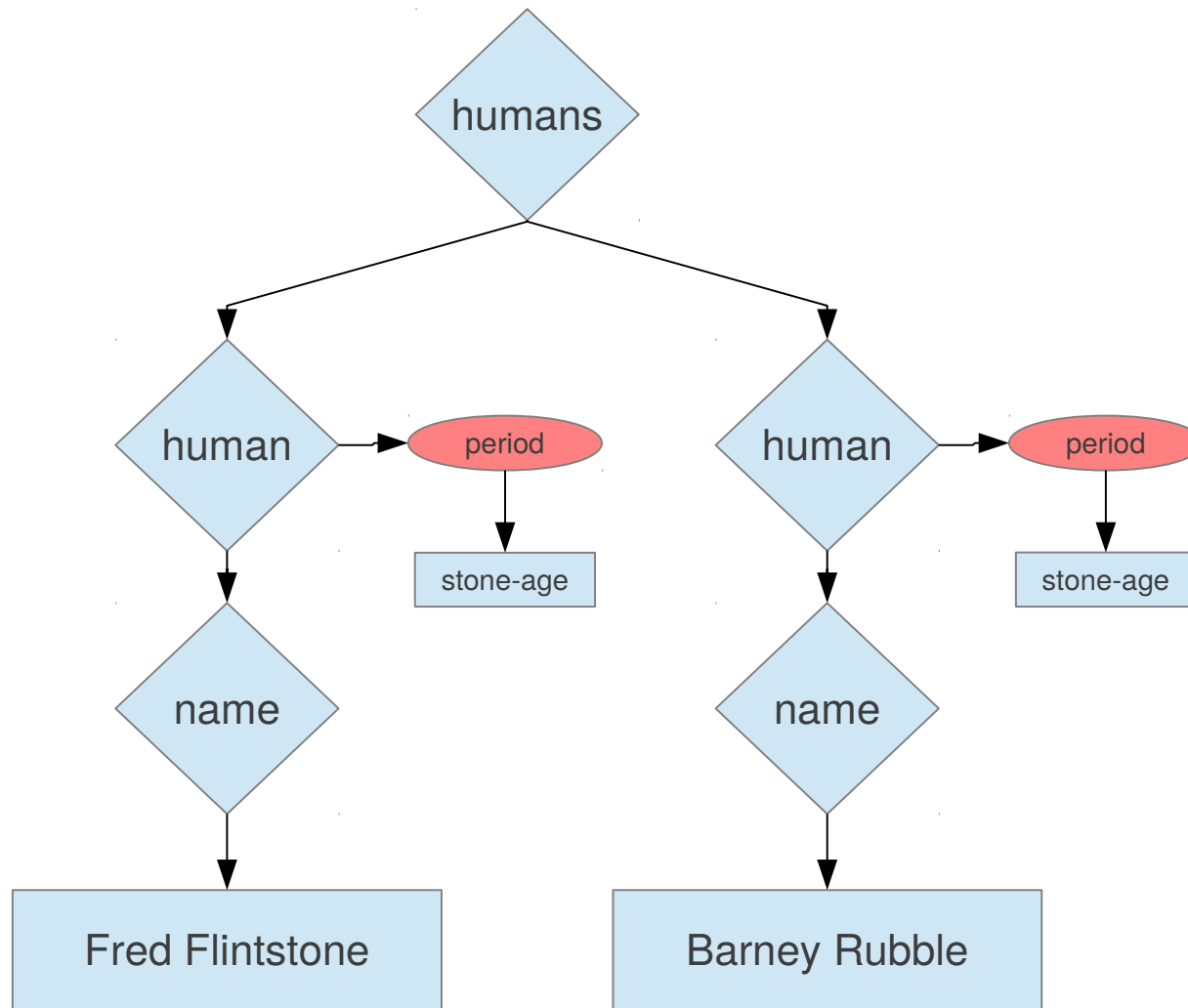
```
<human period="stone-age">  
  <name>Barney Rubble</name>  
</human>
```

- Check well-formedness again. What happens?
Why?

Required: a single root element

- Select both your humans, and press Control+e.
- Type “humans” and press return.
- Check for **well-formedness**.

XML documents are trees



Anybody can make up XML tags

- In our document, we made up three XML elements and one attribute.
- We have the power.
- Everybody has the power.
- What might be the drawbacks of this?

XML Schemas to the rescue

- We need standardization.
- We need a way to enforce compliance and consistency.
- **XML schemas** allow us to do that.
- There are several different types of schema. Hahahaha.
- But we'll be using RelaxNG schemas.

How to use a schema

- <http://hcmc.uvic.ca/workshops/english500/humans.rng>
- In Oxygen: *Document / Schema / Associate Schema.*
- Type or paste in the URL above, and press OK.

```
<?xml-model  
  href="http://hcmc.uvic.ca/workshops/english500/humans.rng"  
  type="application/xml"  
  schematypens="http://relaxng.org/ns/structure/1.0"  
  ?>
```

Well-formedness and Validation

Previously you checked the *well-formedness* of your file.

Now you can also *validate* your file against the schema.

What happens when you do that?

RULE 1 when encoding: *validate your XML all the time.*