

Systems for Design and Implementation

Outline

- XML processing
- Reflection

XML (EXtensible Markup Language) processing

- store and transport data
- human and machine readable

Well formed XML: start+end tag, self-closing tag, quotes or apostrophes for attribute values, no tag overlap, case sensitive, compliant with the declared character encoding

Valid XML: DTD, XML Schema, RELAX NG

Java XML API

```
javax.xml.parsers  
org.w3c.dom  
org.xml.sax  
javax.xml.transform
```

DOM, SAX

[xml](#)

[xml-dom-diagram](#)

Reflection

- a language's ability to inspect and dynamically call classes, methods, attributes at runtime
- applications: IDEs, debuggers, testing frameworks etc

`java.lang.Class`

`java.lang.reflect`

reflection-diagram

reflection