

# XSLT Transformation

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# Introduction

This presentation also serves as documentation, as it explains main elements and possibilities of document creation.

Presentation contents:

- **1. DTD file preview (page 3)**
- **2. Main structure elements (pages 4-5)**
- **3. Main content elements (pages 6-8)**
- **4. Picture elements (pages 9-10)**
- **5. Parameters info (pages 11-13)**



# DTD preview

```
<!-- Basic elements for slide, titles-->
<!ELEMENT slide (title?, subtitle?, (contentblock* | fullslidepic))
<!ELEMENT title (#PCDATA)>
<!ELEMENT subtitle (#PCDATA)>

<!-- Metadata - presentation and author name, used for optional co
<!ELEMENT present_name (#PCDATA)>
<!ELEMENT author_name (#PCDATA)>

<!-- Block of content, used for various combinations of pictures,
<!ELEMENT contentblock (#PCDATA | points | smallpic | sidepic | ju

<!-- element for bold text -->
<!ELEMENT b (#PCDATA)>

<!-- Table elements, th for column headers, td as value in table
<!ELEMENT table (tablerow+)>
<!ELEMENT tablerow (th+ | td+)>
<!ELEMENT td (#PCDATA)>
<!ELEMENT th (#PCDATA)>

<!-- Simple text element -->
<!ELEMENT justtext (#PCDATA | b)*>
```

# Basic elements

```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE present SYSTEM "present.dtd">
<present>
  <csslink csssrc="resources/css/presentation.css" />
  <present_name>XSLT</present_name>
  <author_name>Daniel</author_name>
  <slide>
    <title>Introduction</title>
```

Required root element is `<present>`. Individual slides are then marked by `<slide>` elements.

Another element important for generating html is `<csslink>` with `csssrc` attribute specifying the path. In case no css source is provided, a default value from dtd is used

# More basic elements



- `<present_name>`
- `<author_name>`

These elements contain information about presentation and author name. These will be used only in the case parameters are set up to show cover page.

```
<!-- Basic elements for slide, t
ELEMENT slide title?, subtitle
ELEMENT title (#CDATA)
ELEMENT subtitle (#CDATA)

<!-- Metadata - presentation and
ELEMENT present_name (#CDATA)
ELEMENT author_name (#CDATA)
```

- `<title>`
- `<subtitle>`

Optional elements usable in each slide.

# Content elements

## **<Contentblock>**

Main content should be put into `<contentblock>` element tags. There can be multiple content blocks on one slide, and any number of subelements is allowed.

Subelements which can be used are listed on next slide.

- Sidepic and smallpic with attribute specifying side where they show up
- `<justtext>` for simple text content

```
<subtitle>More basic elements</subtitle>
<contentblock>
  <smallpic src="./imgs/...>
  <points>
    <point><b>&lt;pres
    <point><b>&lt;auth
  </points>
</contentblock>
```

```
<title>Basic elements</title>
<contentblock>
  <sidepic src="./imgs/basi
  <justtext>Required root e
</contentblock>
<contentblock>
<justtext> Another element im
In case no css source is prov
</contentblock>
lide>
```

- `<points>` including `<point>` elements for creating bullet lists
- `<table>` with respective subelements which will be mentioned later

# <Table> element

Table elements can be used to create various tables, building elements required are shown in the table itself. Each row has to be enclosed in <tablerow> tags.



<th>	<th>	<th>	<th>
<td>	<td>	<td>	<td>
<td>	<td>	<td>	<td>
<td>	<td>	<td>	<td>



# Picture elements

## Fullslidepic

```
<!ELEMENT sidepic EMPTY>
<!ATTLIST sidepic
  src CDATA #REQUIRED
  side (left | right) #REQUIRED
>
<!ELEMENT smallpic EMPTY>
<!ATTLIST smallpic
  src CDATA #REQUIRED
  side (left | right) #REQUIRED
>
<!ELEMENT fullslidepic EMPTY>
<!ATTLIST fullslidepic
  src CDATA #REQUIRED
>
```

- Supposed to be in a slide by itself, with the option of title and subtitle use
- Used directly in <slide>

- Automatically centered, uses fixed proportions, so only height size is specified



# Smallpic and sidepic:



- Choice of side required
- part of `<contentblock>`
- differ only in size, specifiable in parameters file



- can specify different height and width and create non-square images

# Parameters

Parameters can be specified in two separate files for pdf and html generating.

- **Z3\_Elias\_params.xml**
- **Z3\_Elias\_html\_params.xml**

Reason for this is different displaying size of pictures in html. That's why different image sizes are set for generating html.



# Example parameters

<b>Param name</b>	<b>Expected values</b>	<b>Purpose</b>
cover_use	yes/no	toggle cover page
pagenum_use	yes/no	toggle page numbering
background_src	filepath	specify background image

# Example parameters 2

Param name	Expected values	Purpose
footer_align	left/center/right	page number positioning
[abc]_size	10px/20pt	Font or image size in px or pt
[abc]_color	red/#110030	Verbal or hexadecimal color specification