

TRANSFORMING DITA DOCUMENTS TO PDF USING CSS

PART 1 – PAGE DEFINITIONS, COVER PAGE AND PDF METADATA

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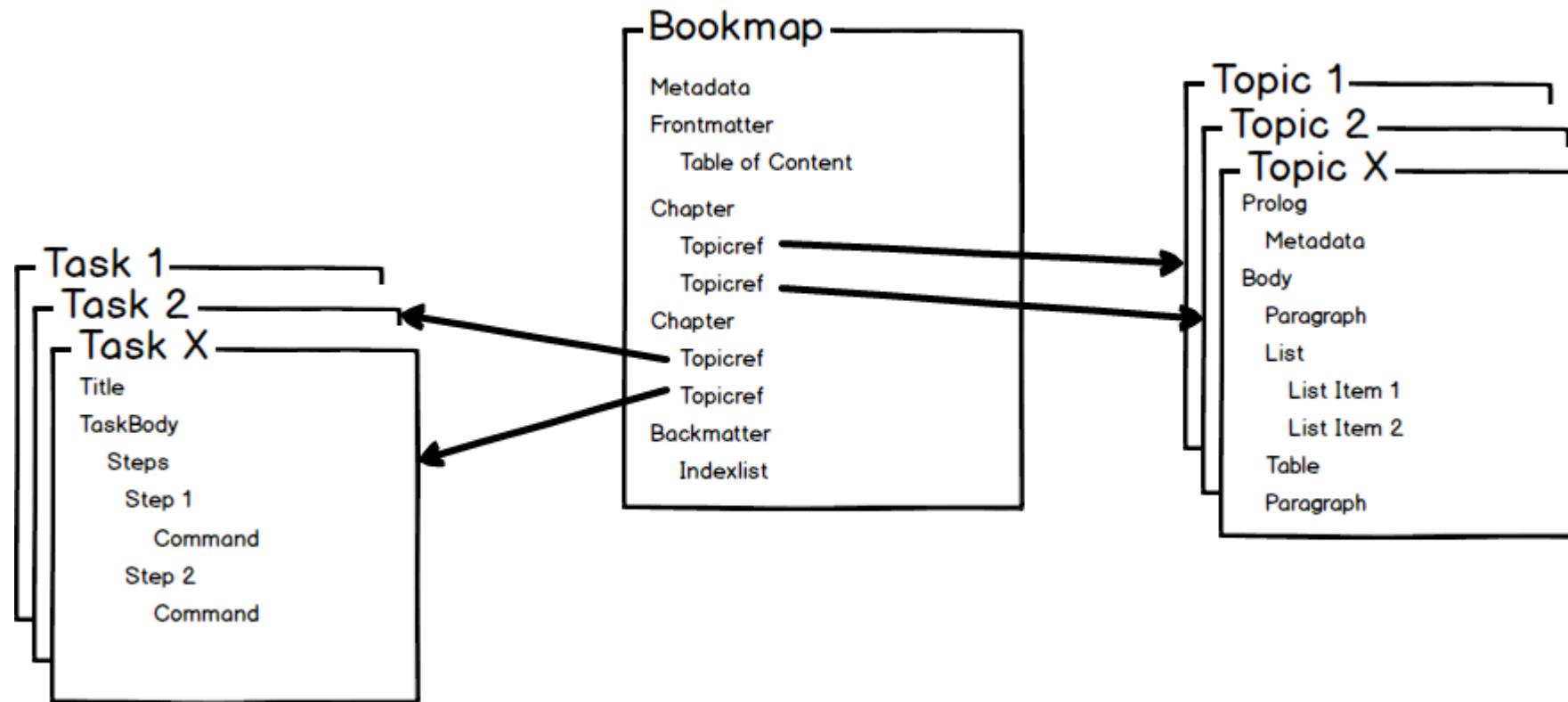
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Introduction – DITA Maps and Bookmaps

- DITA map is the simplest container
- Bookmap is oriented for book contents:
 - Front matter
 - Chapters
 - Appendix
 - Etc.
- Organize DITA topics into hierarchies, groups, and relationships

Introduction – DITA Document Object Model



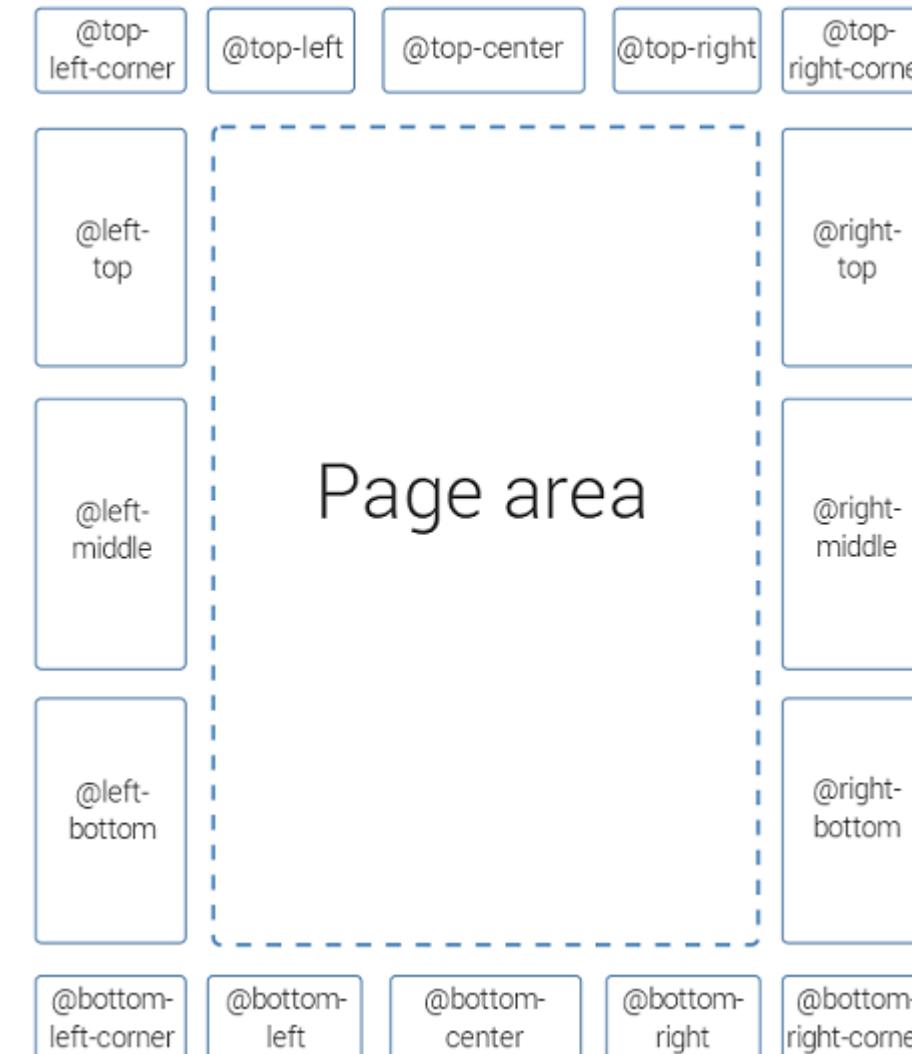
Introduction – DITA Document Object Model

- Using the element name: p, img, table, code, etc.
- Using the @class attribute: Module Type / Element Type
`<p class="- topic/p ">`
- Module Types: Map / Topic / Domain
- Element class can contain multiple combinations → Inheritance
`<codeph class="+ topic/ph pr-d/codeph ">`

Introduction - The @page CSS at-rule

- Define pages (page size, page margins, etc.)
- Used for cover (using 'background' CSS properties)
- Contains the page-margin boxes (headers and footers)
<https://www.w3.org/TR/css-page-3/#margin-boxes>

Introduction - Page-Margin Boxes



Introduction - The @page CSS at-rule

- Define specific rules for specific pages:
 - front-page
 - chapter
 - index
 - Etc.
- Use pseudo-classes
 - :first
 - :left/:right

Note: Pseudo-classes can be mixed

Before we start...

- The sample is a bookmap about ‘Space Exploration’
- The transformation will use a publishing template
- The cover image is an SVG file

Poll

What is your level of CSS knowledge?

Poll

Are you familiar with XPath?

How to define a page

- Use of the @page rule
- Set size, margins, paddings, etc.

```
@page {  
    size: A4;  
    margin: 2cm;  
}
```

How to define a cover

- Use of the 'front-page' selector

```
@page front-page {  
    background-image: url("cover.svg");  
    background-position: center;  
    background-repeat: no-repeat;  
    background-size: 100% 100%;  
}
```

How to customize main title

- Use of the front-page-title @class in selector

```
*[class ~= "front-page/front-page-title"] {  
    color: white;  
    font-size: 3em;  
    margin-top: 6.5cm;  
    padding-left: 7cm;  
}
```

How to add content in headers/footers

- Define page-margin boxes
- Can use the predefined string-sets
 - `maptile`
 - `parttitle`
 - `chaptertitle`
- Can use counters: `counter(page)`

https://www.oxygenxml.com/doc/versions/23.0/ug-ope/topics/dcpp_headers_and_footers.html

How to add content in headers/footers

- Define new string-sets or reuse predefined ones

https://www.oxygenxml.com/doc/versions/23.0/ug-ope/topics/dcpp_headers_and_footers.html#ariaid-title15

Warning: If you define a string-set using the same selector as another string-set, you need to keep both definitions!

What is Metadata?

- It is useful information about a document content (author, audience, dates, versions, keywords, etc.)
- It can be used by external tools for document filtering, indexing, or navigation

How to use metadata: DITA Keywords

- Within the map/bookmap file using the topicmeta/bookmeta element
- Within the topics using the metadata element
- Are displayed in the PDF Document Properties in PDF Viewer

How to use metadata: the oxy_xpath function

- Use to extract and/or process pieces of information from within the document
- Can be tested using the XPath Builder and the .merged.html file
- Can be used both in CSS element rules as in @page rules

Warning: Don't forget to optimize: can cause performance issues!

Useful Links

<https://developer.mozilla.org/en-US/>

<https://www.w3.org/TR/css-page-3/>

https://www.oxygenxml.com/doc/versions/23.0/ug-ope/topics/dcpp_debugging_the_css.html

https://www.oxygenxml.com/doc/versions/23.0/ug-ope/topics/dcpp_page_size.html

https://www.oxygenxml.com/doc/versions/23.0/ug-ope/topics/dcpp_default_page_definitions_css.html

https://www.oxygenxml.com/doc/versions/23.0/ug-ope/topics/dcpp_headers_and_footers.html

https://www.oxygenxml.com/doc/versions/23.0/ug-ope/topics/dcpp_metadata.html

THANK YOU!

Any questions?

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