

# Simple FO example

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

```
<!-- helloworld.fo -->
```

```
<root xmlns='http://www.w3.org/1999/XSL/Format'>
```

```
<layout-master-set>
  <simple-page-master master-name='A4'
    page-height='297mm'
    page-width='210mm'
    margin='20mm'>
    <region-body region-name='xsl-region-body'
      margin-top='10mm' />
  </simple-page-master>
</layout-master-set>
```

`<layout-master-set>`  
defines the format  
and layout of the  
document pages.

`<region-*>` elements  
sets up basic values  
for specific `<flow>` areas  
of the page

```
<page-sequence master-reference='A4'>
  <flow flow-name='xsl-region-body'>
    <block font-size='30'>Hello FO world</block>
  </flow>
</page-sequence>
```

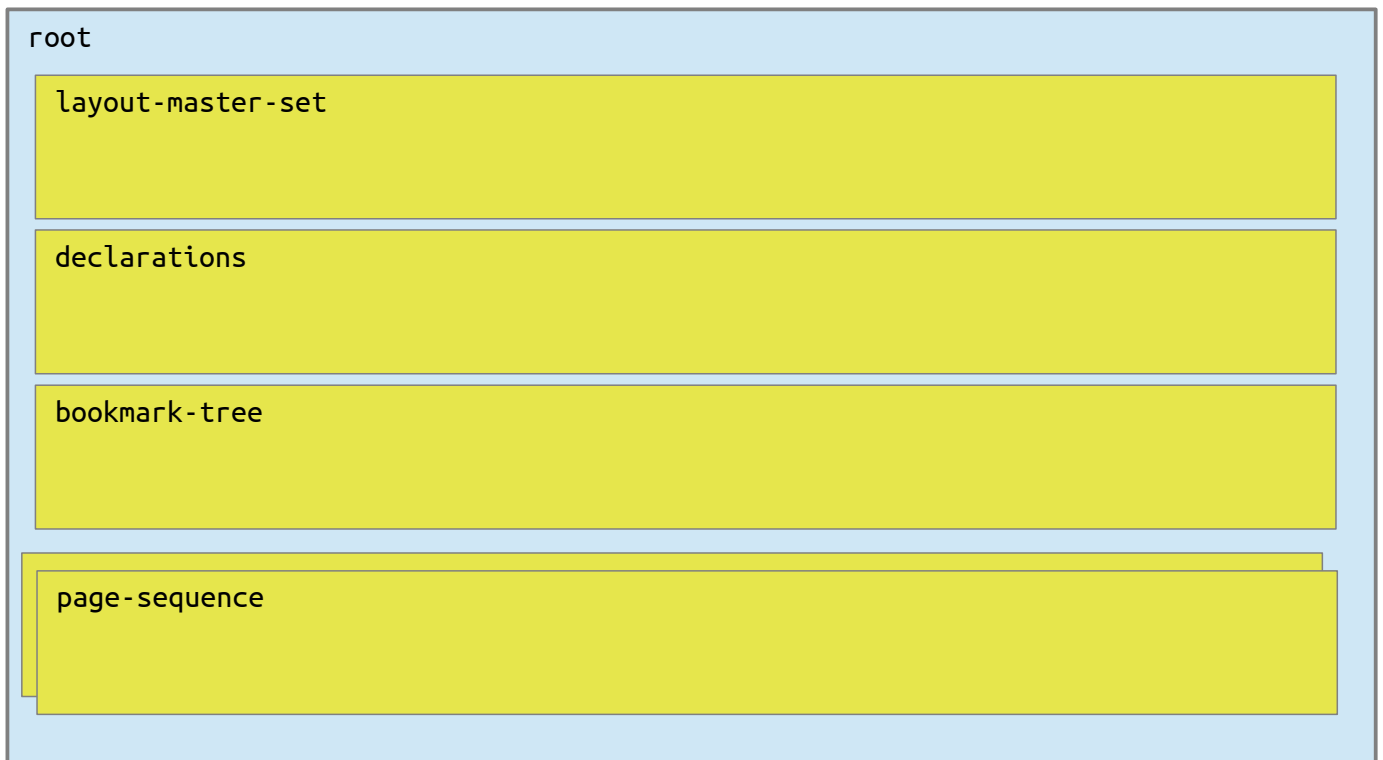
A FO-document needs one  
or more `<page-sequence>`.

Each refers to a specific  
`<simple page-master>`  
and can contain one  
or more `<flow>`

```
</root>
```

`<block>` is the most basic  
"building block"  
of a FO document

# FO structure overview



# FO structure overview 2

## root

*media-usage="auto/paginate/bounded-in-one-dimension/unbounded"*

The root (top) node for XSL-FO documents

### layout-master-set

*Holds all masters used in a document*

### simple-page-master

*Defines the size and shape of a page*

### region-before

*Defines a page header*

### region-body

*Defines a page body*

### region-after

*Defines a page footer*

### region-end

*Defines the right sidebar of a page*

### region-start

*Defines the left sidebar of a page*

## page-sequence-master

*Specifies which simple-page-masters are to be used and in which order*

### repeatable-page-master-alternatives

*Specifies repetition of a set of simple-page-masters*

### single-page-master-reference

*Specifies a page-master to be used at a given point in the sequence of pages*

### repeatable-page-master-reference

*Specifies repetition of a single simple-page-master*

### conditional-page-master-reference

*Specifies a page-master to be used when the conditions defined are true*

## declarations

*Groups global declarations for a stylesheet*

### color-profile

*Defines a color-profile for a stylesheet*

## page-sequence

*A container for page output elements. There will be one <fo:page-sequence> object for each page layout*

### flow

*Contains all elements to be printed to a page*

### block

*Defines a block of output (e.g. paragraphs and titles)*

### inline

*Formats a part of a text with a background or enclosing it in a border*

### character

*Specifies a character that will be mapped to a glyph for presentation*

### static-content

*Contains static content (e.g. headers and footers) that will be repeated on many pages*

# FO structure overview 3

## fo:root

media-usage="auto|paginate|bounded-in-one-dimension|unbounded"

The root (top) node for XSL-FO documents

## layout-master-set

Holds all masters used in a document

## simple-page-master

**master-name**="name" page-height="auto|indefinite|length" page-width="auto|indefinite|length"  
[margin-top;margin-bottom;margin-left;margin-right]="auto|length|percentage" [space-before;space-after]="space"  
[end-indent;start-indent]="length|percentage" reference-orientation="0|90|180|270|-90|-180|-270"  
writing-mode="lr-tb|rl-tb|tb-rl|lr|rl|tb"

Defines the size and shape of a page

**region-body; region-before; region-after; region-start; region-end;**  
**region-name**="name" background-attachment="scroll|fixed" background-color="transparent|color"  
background-image="none|URL" background-repeat="repeat|repeat-x|repeat-y|no-repeat"  
background-position-horizontal background-position-vertical  
[border-bottom-color;border-right-color;border-left-color;border-top-color;  
border-start-color;border-end-color;border-before-color;border-after-color]="color"  
[border-start-style;border-end-style;border-top-style;border-bottom-style;  
border-right-style;border-left-style;border-before-style;border-after-style;]  
="none|hidden|dotted|dashed|solid|double|groove|ridge|inset|outset"  
[border-top-width;border-bottom-width;border-end-width;border-left-width;border-right-width;  
border-start-width;border-before-width;border-after-width]="thin|medium|thick|length|length-conditional"  
[padding-before;padding-after;padding-start;padding-end;padding-top;  
padding-bottom;padding-left;padding-right]="auto|length|percentage|length-conditional"  
[margin-top;margin-bottom;margin-left;margin-right]="auto|length|percentage"  
[space-before;space-after]="space" start-indent end-indent clip column-count column-gap display-align  
overflow reference-orientation writing-mode

Defines a page body

## page-sequence-master

*master-name*

## single-page-master-reference

*master-reference*

## repeatable-page-master-reference

*maximum-repeats*

## repeatable-page-master-alternatives

*maximum-repeats*

## conditional-page-master-reference

*master-reference page-position  
Odd-or-even blank-or-not-blank*

# FO structure overview 4

## **fo:root**

media-usage="auto|paginate|bounded-in-one-dimension|unbounded"

The root (top) node for XSL-FO documents

## **declarations**

-  
Groups global declarations for a stylesheet

### **color-profile**

src color-profile-name  
rendering-intent

Defines a color-profile for a stylesheet

## **bookmark-tree**

-  
The fo:bookmark-tree formatting object is used to hold a list of access points within the document such as a table of contents, a list of figures or tables, etc. Each access point is called a bookmark.

### **bookmark**

source-document role external-destination="URI"  
Internal-destination starting-state

The fo:bookmark formatting object is used to identify an access point, by name, and to specify where that access point is within the current document or another external document. A given bookmark may be further subdivided into a sequence of (sub-)bookmarks to as many levels as the authors desire.

### **bookmark-title**

source-document role color  
font-style font-weight

The fo:bookmark-title formatting object is used to identify, in human readable form, an access point.

# FO structure overview 5

## fo:root

media-usage="auto|paginate|bounded-in-one-dimension|unbounded"

The root (top) node for XSL-FO documents

## page-sequence

master-reference="name" id="id" country="country|none" force-page-count format  
grouping-separator grouping-size initial-page-number language="language|none" letter-value

A container for page output elements. There will be one <fo:page-sequence> object for each page layout

## flow

flow-name="name"

Contains all elements to be printed to a page

## block

id="id" source-document role background-attachment background-color background-image  
background-repeat  
background-position-horizontal background-position-vertical border-before-color  
border-before-style border-before-width border-after-color border-after-style  
border-after-width border-start-color border-start-style border-start-width  
border-end-color border-end-style border-end-width border-top-color border-top-style  
border-top-width border-bottom-color border-bottom-style border-bottom-width border-left-color  
border-left-style border-left-width border-right-color border-right-style border-right-width  
padding-before padding-after padding-start padding-end padding-top padding-bottom padding-left  
padding-right font-family font-selection-strategy font-size font-stretch font-size-adjust  
font-style font-variant font-weight country language script hyphenate hyphenation-character  
hyphenation-push-character-count hyphenation-remain-character-count margin-top margin-bottom  
margin-left margin-right space-before space-after start-indent end-indent relative-position  
break-after break-before color text-depth text-altitude hyphenation-keep hyphenation-ladder-count  
intrusion-displace keep-together keep-with-next keep-with-previous last-line-end-indent  
linefeed-treatment line-height line-height-shift-adjustment line-stacking-strategy orphans  
white-space-treatment span text-align text-align-last text-indent visibility white-space-collapse  
widows wrap-option

Defines a block of output (e.g. paragraphs and titles)

## inline

id source-document role background-attachment background-color background-image  
background-repeat background-position-horizontal background-position-vertical  
border-before-color border-before-style border-before-width border-after-color  
border-after-style border-after-width border-start-color border-start-style  
border-start-width border-end-color border-end-style border-end-width border-top-color  
border-top-style border-top-width border-bottom-color border-bottom-style  
border-bottom-width border-left-color border-left-style border-left-width  
border-right-color border-right-style border-right-width padding-before padding-after  
padding-start padding-end padding-top padding-bottom padding-left padding-right  
font-family font-selection-strategy font-size font-stretch font-size-adjust  
font-style font-variant font-weight space-end space-start relative-position  
align-ment-adjust alignment-baseline baseline-shift block-progression-dimension color  
dominant-baseline height inline-progression-dimension keep-together keep-with-next  
keep-with-previous line-height text-decoration visibility width wrap-option

## static-content

flow-name

## block

## inline

# FO structure overview 6

**fo:root**

media-usage="auto|paginate|bounded-in-one-dimension|unbounded"

The root (top) node for XSL-FO documents

page-sequence

flow

block

basic-link

leader

page-number-citation

page-sequence

flow

block

external-graphic

table

table-column

table-body

table-row

table-cell

## leader

Used to generate "." to separate titles from page numbers in table of contents, or to create input fields in forms, or to create horizontal rules

## bidirectional-override

Overrides the default Unicode BIDI direction

## external-graphic

Typically used to position an image in a separate area at the beginning of a page OR to position an image to one side, with the content flowing along-side of the image

## marker

Used with <fo:retrieve-marker> to create running headers or footers

## block-container

Defines a block-level reference-area

## basic-link

Represents the start resource of a link

## wrapper

Specifies inherited properties for a group of XSL-FO objects

## title

Defines a title for a page-sequence

## retrieve-marker

Used with <fo:marker> to create running headers or footers

## float

Used for a graphic where the graphics data resides outside of the XML result tree

## footnote

Defines a footnote within the region-body of a page

## footnote-body

Defines the content of the footnote

## initial-property-set

Formats the first line of an <fo:block>

## page-number

Represents the current page-number

## inline-container

Defines an inline reference-area

## page-number-citation

References the page-number for the page that contains the first normal area returned by the cited object

## instream-foreign-object

Used for inline graphics or for "generic" objects where the object's data resides as descendants of <fo:instream-foreign-object>

## table

Formats the tabular material of a table

## table-column

Formats the columns of a table

## list-item

Contains each item in the list

## list-block

Defines a list

## list-item-body

Contains the content/body of the list-item

## list-item-label

Contains the label for the list-item (typically a number, character, etc.)

## table-header

Defines a table header

## table-row

Defines a table row

## table-cell

Defines a table cell

## table-caption

Contains the caption for a table

## multi-properties

Used to switch between two or more property-sets

## table-body

Container for table rows and table cells

## table-footer

Defines a table footer

## multi-case

Contains (within an <fo:multi-switch>) each alternative sub-tree of XSL-FO objects. The parent <fo:multi-switch> will choose which alternative to show and hide the rest

## multi-property-set

Specifies an alternative property-set that will be applied depending on the state of the user agent

## table-and-caption

Formats a table and its caption

## multi-toggle

Used to switch to another <fo:multi-case>

## multi-switch

Holds one or more <fo:multi-case> objects and controls the switching between them (activated by <fo:multi-toggle>)