

# Layout and Design Style Sheets (LDSS)

## Introduction

5 Layout and Design Style Sheets (LDSS) defines a standard for defining the layout and design of an (X)HTML document, among others. It can be seen as the successor to the CSS (Cascading Style Sheets) standard.

This document contains the draft version of the LDSS version 1.0 standard.

## Overview

- 10 The layout part of LDSS defines a so-called block model, in which the page is split into blocks, the dimensions of which can be either static or dynamic, adapting to resizing of the page in the latter case. Provisions for presets including centering (vertical, horizontal) of blocks is made. Blocks can be nested whereby the parent block affects the positioning of the child block. The page itself is the main block and is always present.
- 15 The design part defines properties such as colour, fonts and font-styling. Text is also treated as a block and can be manipulated using the layout properties, as are other data sources such as images. Embedded fonts are under consideration.

## Units

- 20 When specifying units of distance, size or similar, the following definitions of measurement can be used:
- *Pixels (px)* – pixels of target display.
  - *Percentage (%)* - percentage of target display.
  - *'font-size' (em)* – font-size of current block, or font-size of parent block if used in font-size property itself.
- 25

## Syntax

### Comments

Comments in LDSS can be indicated using the following methods:

- `//` double slashes, C++-style comment.
- 30 • `/* comment */` slash-star, star-slash, C-style comment.

## Variables

Variables can use any of the characters [a-z, A-Z, 0-9, \_], and are prefixed with a dollar sign (\$). Variables are defined using

```
$variable = "string";
```

- 35 A simple search & replace is performed on variables in the LDSS file prior to it being applied to the target document.

## Definition blocks

One or more tag names, class, or id names, followed by a curly bracket open, block definition content (see property lists) and a closing curly bracket.

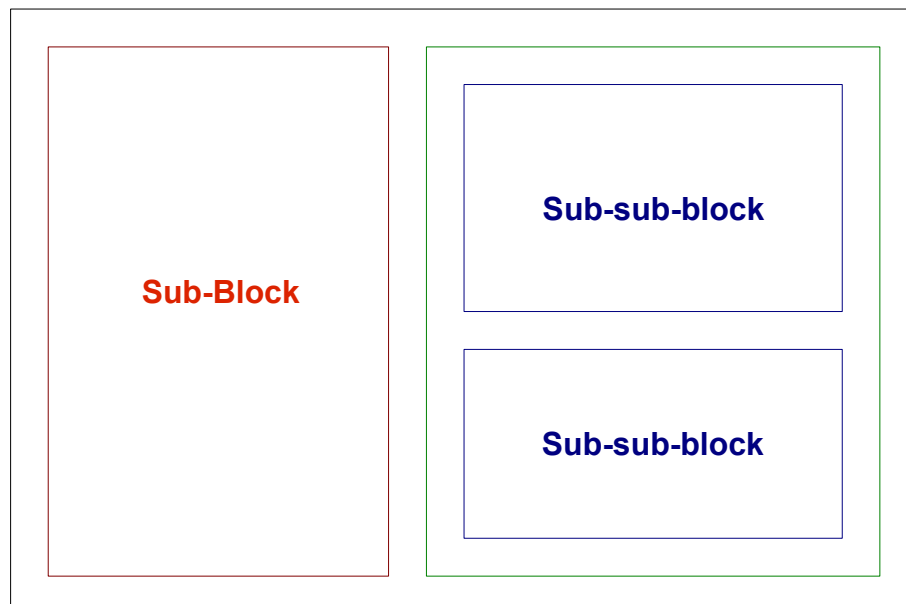
```
Tag.class Tag { definition }  
Tag#id Tag { definition }
```

- 40 If the tag part is omitted before the dot preceding the class name, it is interpreted as meaning all tags with that class name.

## Blocks

- 45 A block can take many forms but in essence it's a rectangular shape, starting with the page itself as the base block.

### Page Block



## Page Block

- 50 The page block defines the document the other blocks are placed on. It sets the boundaries and base properties. For an HTML document the page block is defined by the <body> tag.

```
Body { definition }
```

## Sub-block

- 55 Sub-blocks are any blocks placed inside the page block. They can be nested to any depth. For an HTML document a sub-block is defined by the <div> tag, with its class or id property linking it to an LDSS definition.

```
tag-name.class-name { definition }
```

Or for an id property name:

```
tag-name#id-name { definition }
```

- 60 It is also possible to use just the name of an HTML tag, and have it apply to all blocks created using that tag. Blocks can also be addressed within blocks:

```
Block1 tag-name { definition }  
Block1 tag-name.class-name { definition }
```

## Properties

- 65 For each block a number of properties apply. This section lists all of them divided into Layout and Styling properties.

## Layout

Layout properties concern themselves with the positioning of blocks on the Page Block and relative to each other. These properties include dimensions, position, margins around blocks and padding inside blocks.

## 70 Dimensions

Height	Height of the block. Defaults to height of the content.
Width	Width of the block. Defaults to width of the content.
Min-height	Minimum height of the block.
Min-width	Minimum width of the block.
Max-height	Maximum height of the block.
Max-width	Maximum width of the block.

## Positioning

Position	Defines both x and y parameters, space-separated.
Position-x	Defines x-position relative to top-left of parent block.
Position-y	Defines y-position relative to top-left of parent block.
Position-z	Defines z-position. Defaults to 1.
Fixed	Defines a fixed position relative to the browser window. Reference, x, y.
Align	Aligns to left/center/right/value/%.
Vertical-align	Aligns to top/center/bottom/value/%. Text adds sub/super/text-top/text-bottom.
Alpha	Sets alpha level for entire block. 0-100%.

## Margin

Margin	Sets all margins. Space-separated list.
Margin-bottom	Bottom margin.
Margin-left	Left margin.
Margin-top	Top margin.
Margin-right	Right margin.

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## Padding

Padding	Sets all padding. Space-separated list.
Padding-bottom	Bottom padding.
Padding-left	Left padding.
Padding-top	Top padding.
Padding-right	Right padding.

## Style

80 The style properties include those which affect the appearance of a design, including colours, borders and fonts plus text styles.

## Background

Background	Sets all background properties.
Background-attachment	Sets fixed or scrolling background image.

Background-color	Sets a background color.
Background-image	Sets a background image.
Background-position	Sets starting position of background image.
Background-repeat	Sets how a background image is repeated.
Background-alpha	Sets alpha level (transparency) of background.

## Border, Corner and Outline

Border	Sets all border properties.
Border-alpha	Sets alpha levels for the four borders.
Border-bottom	Sets bottom border properties.
Border-bottom-color	Sets bottom border color.
Border-bottom-style	Sets bottom border style
Border-bottom-width	Sets width of bottom border.
Border-bottom-alpha	Sets alpha level of bottom border.
Border-color	Sets the color of the four borders.
Border-image	Sets image for all the four borders.
Border-left	Sets left border properties.
Border-left-color	Sets left border color.
Border-left-style	Sets left border style.
Border-left-width	Sets left border width.
Border-left-alpha	Sets alpha level of left border.
Border-right	Sets right border properties.
Border-right-color	Sets right border color.
Border-right-style	Sets right border style.
Border-right-width	Sets right border width.
Border-right-alpha	Sets alpha level of right border.
Border-top	Sets top border properties.
Border-top-color	Sets top border color.
Border-top-style	Sets top border style.
Border-top-width	Sets top border width.
Border-top-alpha	Sets alpha level of top border.
Border-style	Sets the style of the four borders.
Border-width	Sets the width of the four borders.

Outline	Sets all outline properties.
Outline-color	Color of outline.
Outline-style	Style of outline.
Outline-width	Width of outline.
Corner	Sets corner properties of the four corners.
Corner-alpha	Sets alpha levels of the four corners.
Corner-image	Sets images for the four corners.
Corner-top-left	Sets bottom corner properties.
Corner-top-left-curve	Curve of bottom corner.
Corner-top-left-color	Color of bottom corner.
Corner-color	Sets color of the four corners.
Corner-right-left	Sets left corner properties.
Corner-right-left-curve	Curve of left corner.
Corner-right-left-color	Color of left corner.
Corner-bottom-left	Sets right corner properties.
Corner-bottom-left-curve	Curve of right corner.
Corner-bottom-left-color	Color of right corner.
Corner-bottom-right	Sets top corner properties.
Corner-bottom-right-curve	Curve of top corner.
Corner-bottom-right-color	Color of top corner.

## 85 Fonts

Font	Sets all font properties. Space-separated list.
Font-family	Sets the font family.
Font-size	Sets the font size.
Font-style	Sets the font style. Normal, italic.
Font-weight	Sets the weight of a font. Bold.

## Generated Content

Content	Inserted using the :before :after pseudo-elements.
Counter-increment	Increments one or more counters.
Counter-reset	Creates or resets one or more counters.
Quotes	Sets the type of quotation marks for embedded quotations.

## List

List-style	Sets all properties for a list.
List-style-image	Specifies an image for the list-item marker.
List-style-position	Whether list-item markers appear in- or outside content flow.
List-style-type	Sets type of list-item marker.
List-flow	Sets flow of list items. Vertical or horizontal.

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## Text

Color	Color of the text.
Direction	Text direction. Ltr/rtl/down-rtl.
Letter-spacing	Spacing between letters.
Line-height	Sets the line height.
Text-decoration	Specifies decoration added to text.
Text-indent	Indentation of first line in a text block.
Text-shadow	Sets the shadow added to text.
Text-transform	Controls the text capitalization.
White-space	How whitespace is treated.
Word-spacing	The spacing between words.

## Pseudo-classes/elements

:active	Add style to active element.
:after	Adds content after an element.
:before	Adds content before an element.
:first-child	Adds style to element which is the first child of another element.
:first-letter	Adds style to the first character of text.
:first-line	Adds style to the first line of text.
:focus	Adds style to an element with keyboard focus.
:hover	Adds style to an element with mouse focus.
:lang	Adds style to an element with specific lang attribute.
:link	Adds style to an unvisited link.
:visited	Adds style to a visited link.

## Pre-processor

Before an LDSS stylesheet is applied to a document it is first parsed by a pre-processor. Its task is to look for variable definitions and do a search and replace on those variables, replacing their appearances in the LDSS file with the string content of the variable.