

FOSDEM 2020

Make Online yours:

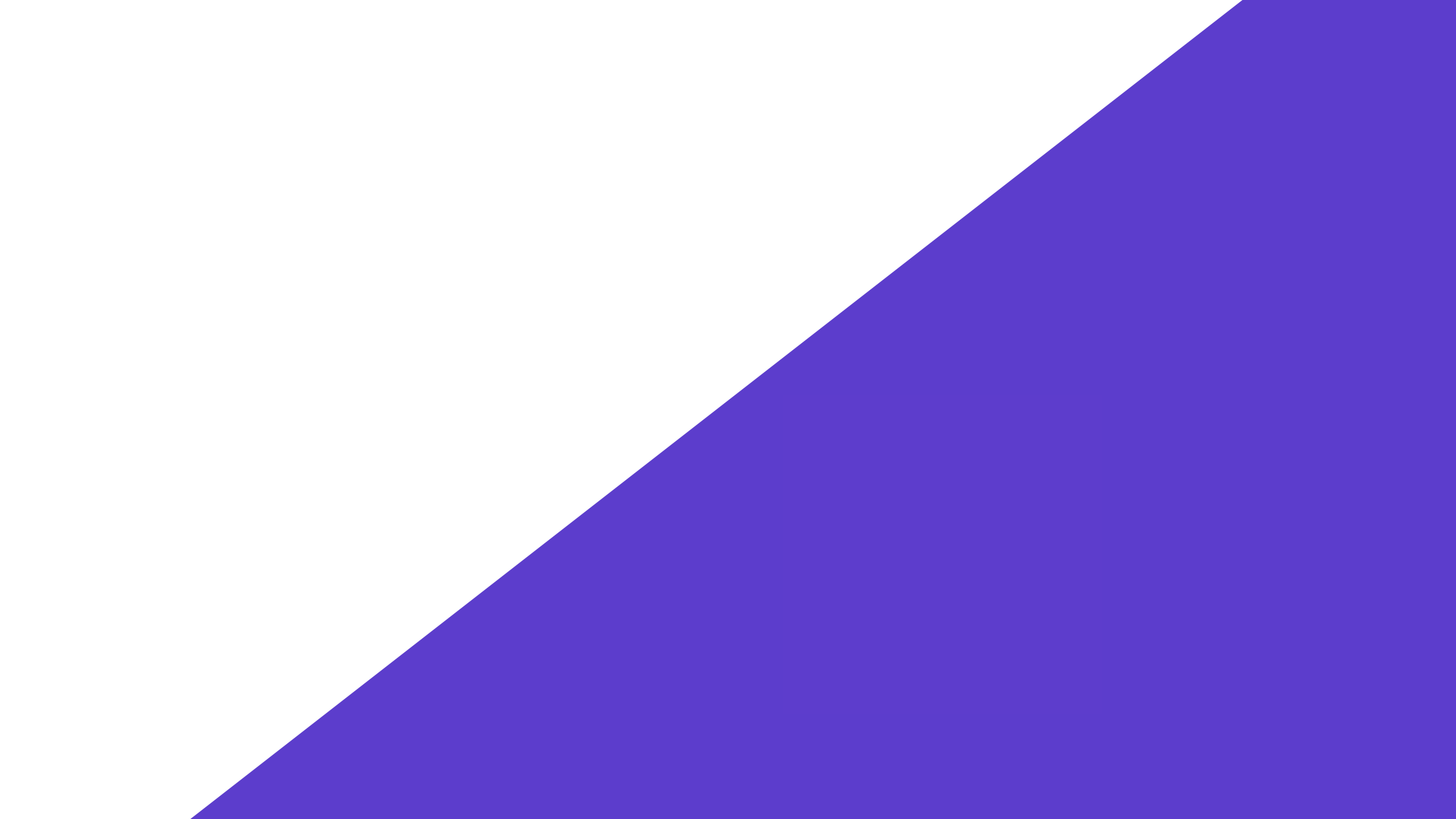
How to customize Collabora Online

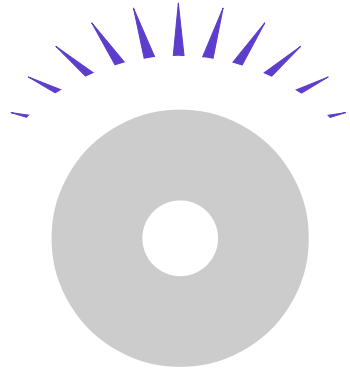
By Pedro Pinto Silva

Designer at Collabora Productivity

@PedroPS @CollaboraOffice







Customizing



XML

CSS

SVG



XML

CSS

SVG



XML

CSS

SVG

Widgets and overall theme

FORMAT CELLS

NumbersFontFont EffectsAlignmentAsian TypographyBordersBackgroundCell Protection

Line Arrangement

Presets:

User-defined:

Adjacent Cells:

☐ Remove border

Shadow Style

Position:

Line

Style:

Width:

4.25 pt

—

+

Color:

Light Purple 1

Padding

Left: 1.0 pt

—

+

Right: 1.0 pt

—

+

Top: 1.0 pt

—

+

Bottom: 1.0 pt

—

+

☒ Synchronize

Distance:

30 pt

—

+

Color:

Light Purple 4

Help

Reset

OK

Cancel

FileEditViewInsertFormatTableToolsHelp

Default Style

211

Text

Text orientation

Spacing

Align

Lists

Character...

Paragraph...

Bullets and Numbering...

Page...

Sections...

Position and Size...

Line...

Area...

Watermark...

Columns...

Clear Direct Formatting

12

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Aa

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Search:

Page 1 of 1

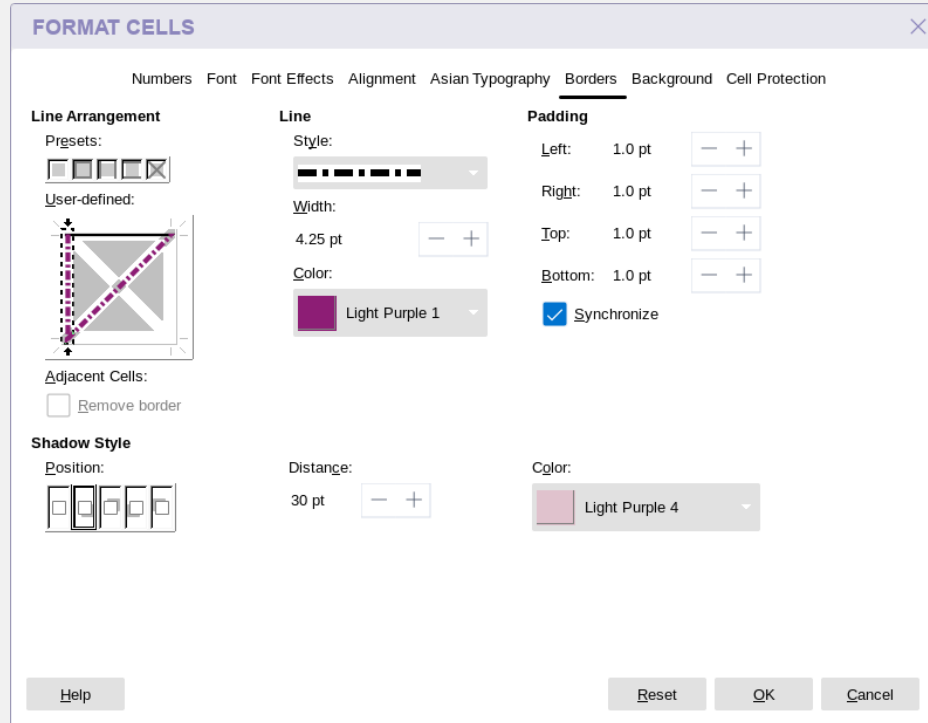
2 words, 11 characters

Insert

Standard selection

English (USA)

Widgets



→ Widgets are customizable

→ Uses new extended instance of NWF¹

→ Draws interface depending on a definition

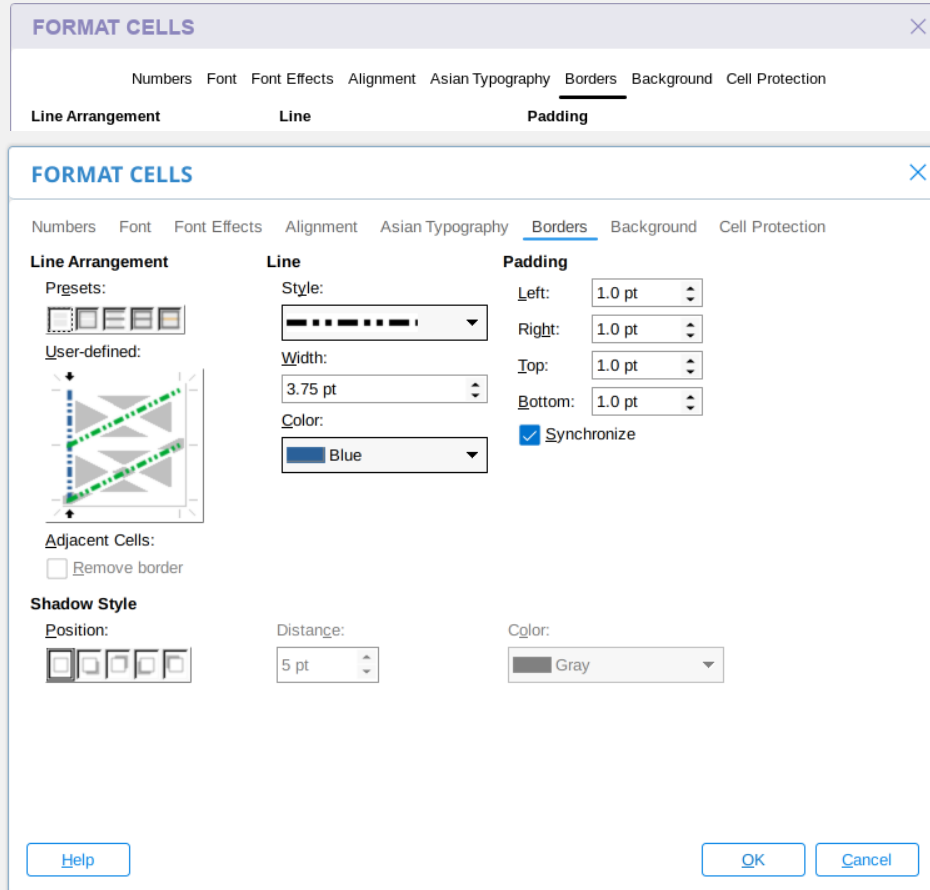
→ It allows multiple definitions

→ = multiple themes

→ Having a theme depending on each environment it's a reality

→ Sponsored work by Adfinis for iOS

Widgets



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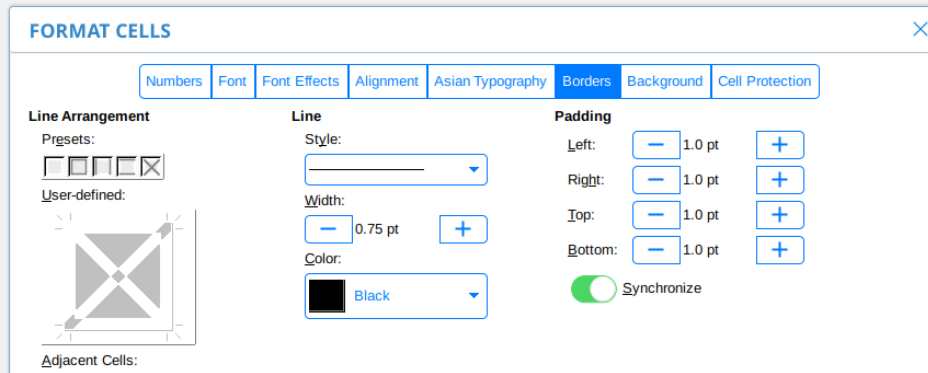
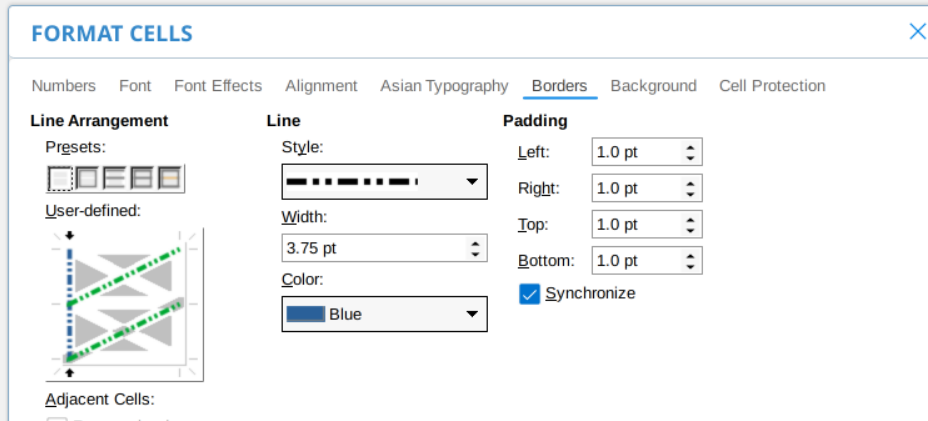
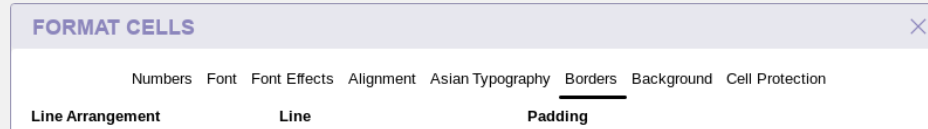
→ = multiple themes

→ Having a theme depending on each environment it's a reality

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1) Tomaž Vajngerl's presentation
col.la/libocon2019vajngerl

Widgets



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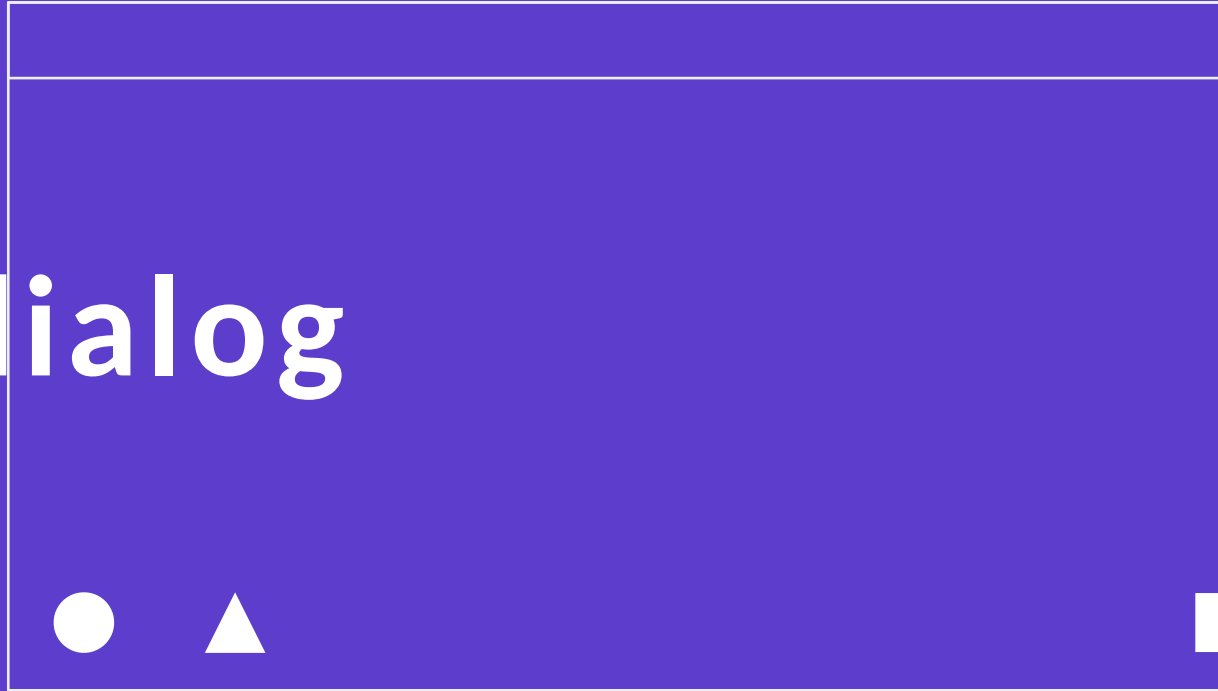
→ = multiple themes

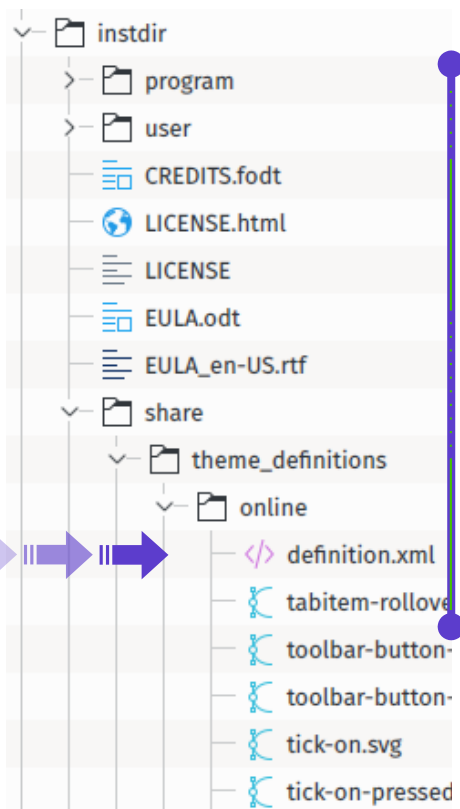
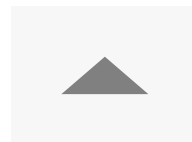
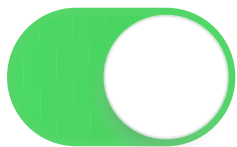
→ Having a theme depending on each environment it's a reality

→ Sponsored work by Adfinis for iOS

1) Tomaž Vajngerl's presentation
col.la/libocon2019vajngerl

Example: dialog





Colours

```
<widgets>
```

```
<style>
```

```
<faceColor value="#F7F7F7"/>
```

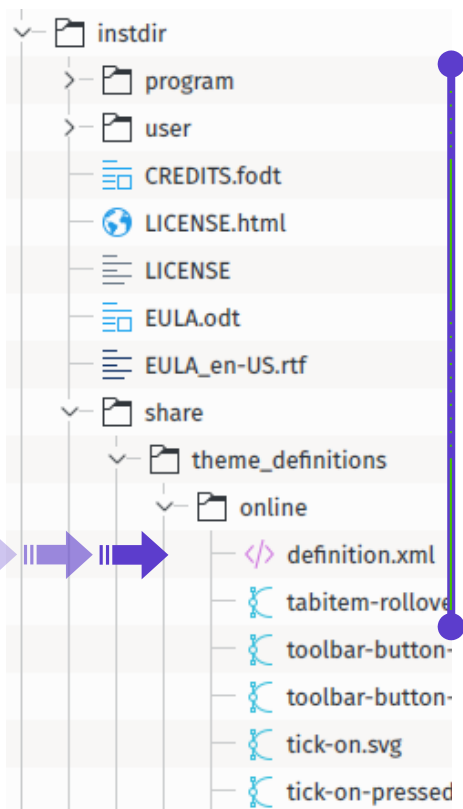
```
<checkedColor value="#C0C0C0"/>
```

```
<lightBorderColor value="#F7F7F7"/>
```

```
[...]
```

```
<fontColor value="#000000"/>
```

```
</style>
```



```
<settings>
```

```
<noActiveTabTextRaise value="true"/>
```

```
<centeredTabs value="false"/>
```

```
<listBoxEntryMargin value="0"/>
```

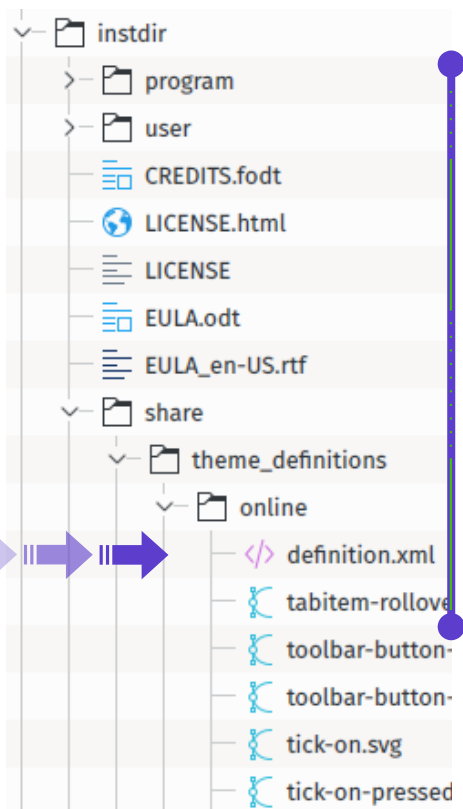
```
<defaultFontSize value=""/>
```

```
<titleHeight value="16"/>
```

```
[...]
```

```
</settings>
```

Settings



<radiobutton>

<part value="Entire" width="20" height="20">

<state enabled="true" pressed="false" button-value="true">

<image source="radio-on.svg" />

</state>

<state enabled="true" pressed="true" button-value="true">

<image source="radio-on-pressed.svg" />

</state>

<state enabled="false" button-value="true">

<image source="radio-on-disabled.svg" />

</state>

<state enabled="true" pressed="false" button-value="false">

<image source="radio-off.svg" />

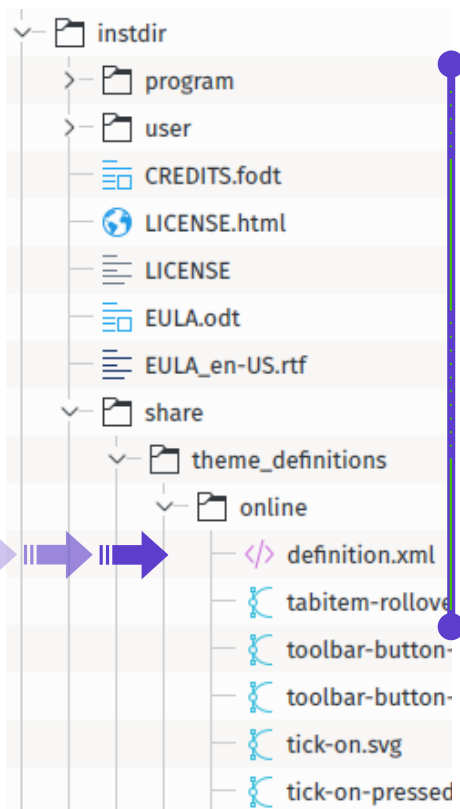
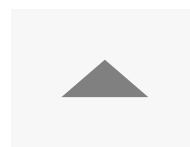
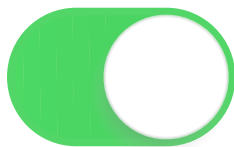
</state>

<state enabled="true" pressed="true" button-value="false">

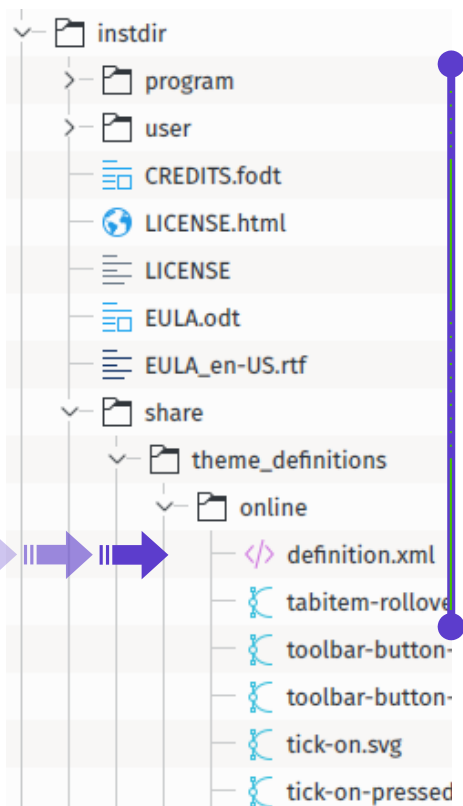
<image source="radio-off-pressed.svg" />

</state>

Element



	part	type	Element
	<code><part value="Entire" width="20" height="20"></code>		
	<code><state enabled="true" pressed="false" button-value="true"></code>		
	<code><image source="radio-on.svg" /></code>		
	<code></state></code>	<code>state</code>	
	<code><state enabled="true" pressed="true" button-value="true"></code>		
	<code><image source="radio-on-pressed.svg" /></code>		
	<code></state></code>		
	<code><state enabled="false" button-value="true"></code>		
	<code><image source="radio-on-disabled.svg" /></code>		
	<code></state></code>		
	<code><state enabled="true" pressed="false" button-value="false"></code>		
	<code><image source="radio-off.svg" /></code>		
	<code></state></code>		
	<code><state enabled="true" pressed="true" button-value="false"></code>		
	<code><image source="radio-off-pressed.svg" /></code>		
	<code></state></code>		



<radiobutton>

<part value="Entire" width="20" height="20">

<state enabled="true" pressed="false" button-value="true">

<image source="radio-on.svg" />

</state>

<state enabled="true" pressed="true" button-value="true">

<image source="radio-on-pressed.svg" />

</state>

<state enabled="false" button-value="true">

<image source="radio-on-disabled.svg" />

</state>

<state enabled="true" pressed="false" button-value="false">

<image source="radio-off.svg" />

</state>

<state enabled="true" pressed="true" button-value="false">

<image source="radio-off-pressed.svg" />

</state>

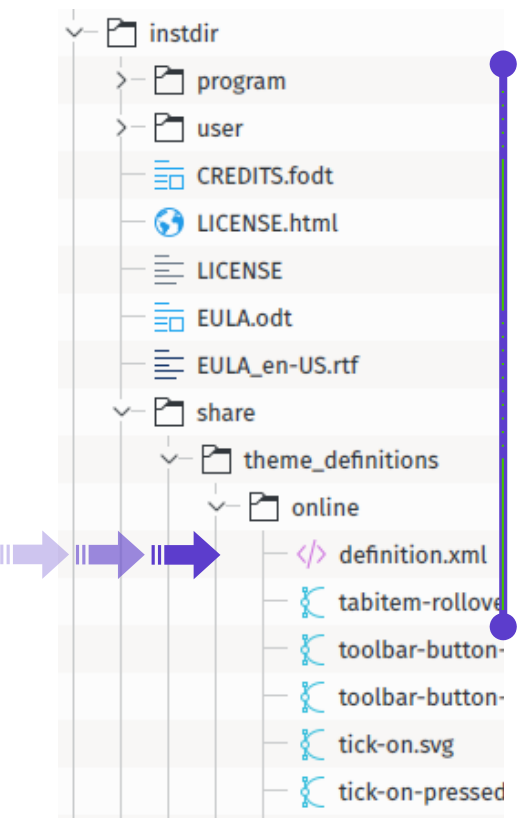
Element



Supported states: enabled, focused, pressed, rollover, default, selected, button-value, extra

Multiple states can be active at the same time

- But it always resolves to one solution



Widgets and overall theme

FORMAT CELLS

Numbers

Font

Font Effects

Alignment

Asian Typography

Borders

Background

Cell Protection

Line Arrangement

Line

Padding

FORMAT CELLS

Numbers

Font

Font Effects

Alignment

Asian Typography

Borders

Background

Cell Protection

Line Arrangement

Line

Padding

Presets:

User-defined:

Style:

Width:

Color:

Left:

Right:

Top:

Bottom:

Synchronize

Adjacent Cells:

FORMAT CELLS

Numbers

Font

Font Effects

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Asian Typography

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Background

Cell Protection

Line Arrangement

Line

Padding

Presets:

User-defined:

Style:

Width:

Color:

Left:

Right:

Top:

Bottom:

Synchronize

Adjacent Cells:

File

Edit

View

Insert

Format

Table

Tools

Help

Last modification: 1 minute ago

Default Style

2

1

1

Text

Text orientation

Spacing

Align

Lists

Character...

Paragraph...

Bullets and Numbering...

Page...

Sections...

Position and Size...

Line...

Area...

Watermark...

Columns...

Clear Direct Formatting

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11

12

13

Search:

Page 1 of 1

2 words, 11 characters

Insert

Standard selection

English (USA)

Widgets and overall theme

FORMAT CELLS

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Cell Protection

Line Arrangement

Line

Padding

Presets:

User-defined:

Adjacent Cells:

FORMAT CELLS

Numbers

Font

Font Effects

Alignment

Asian Typography

Borders

Background

Cell Protection

Line Arrangement

Line

Padding

Presets:

User-defined:

Adjacent Cells:

File

Edit

View

Insert

Format

Table

Tools

Help

Last modification: 1 minute ago

Default Style

2

1

Text

Text orientation

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Search:

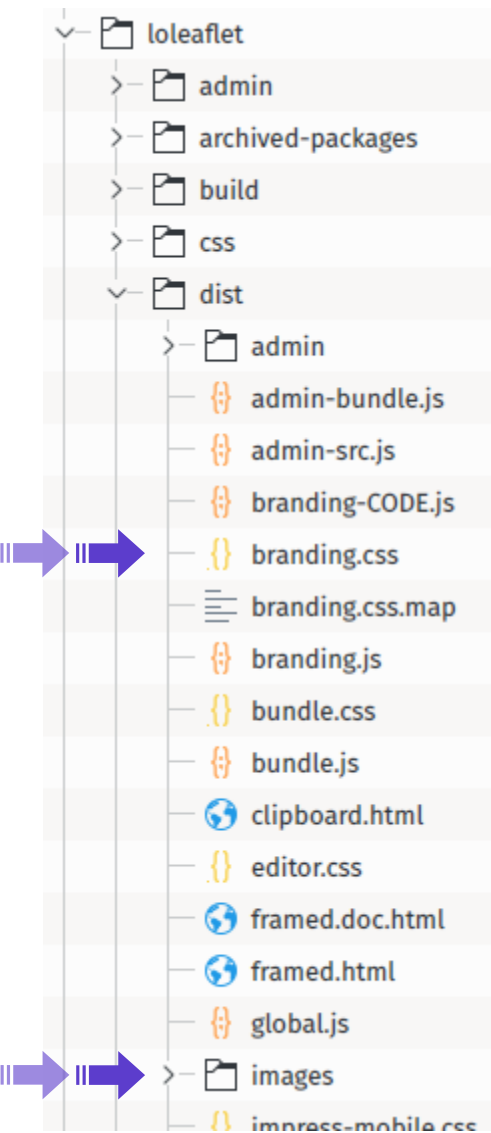
Page 1 of 1

2 words, 11 characters

Insert

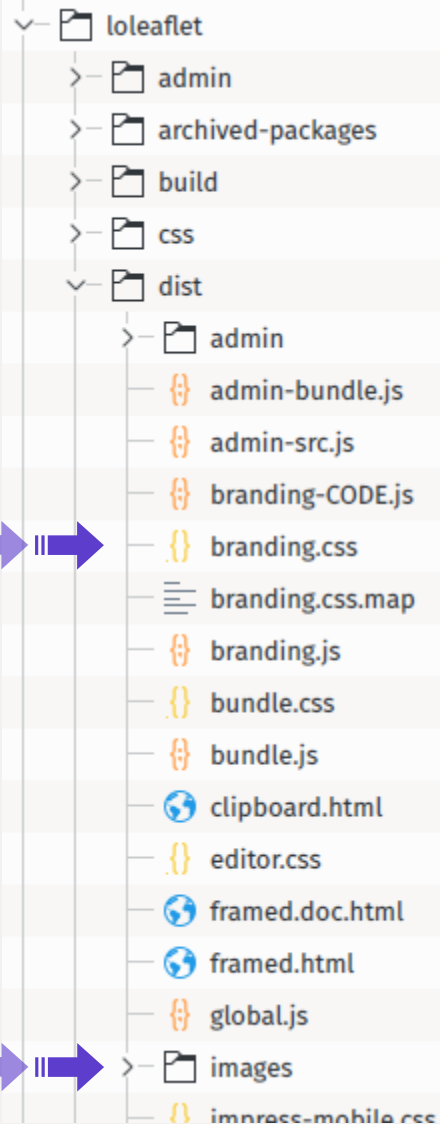
Standard selection

English (USA)



→ Goal: easy to set up & easy to hack

- Preparations before customizing it
- One to rule them all?
- Could it be more efficient?
- Improving workflow
- What if...



- Goal: easy to set up & easy to hack

→ Preparations before customizing it 1) collaboraoffice.com/code/

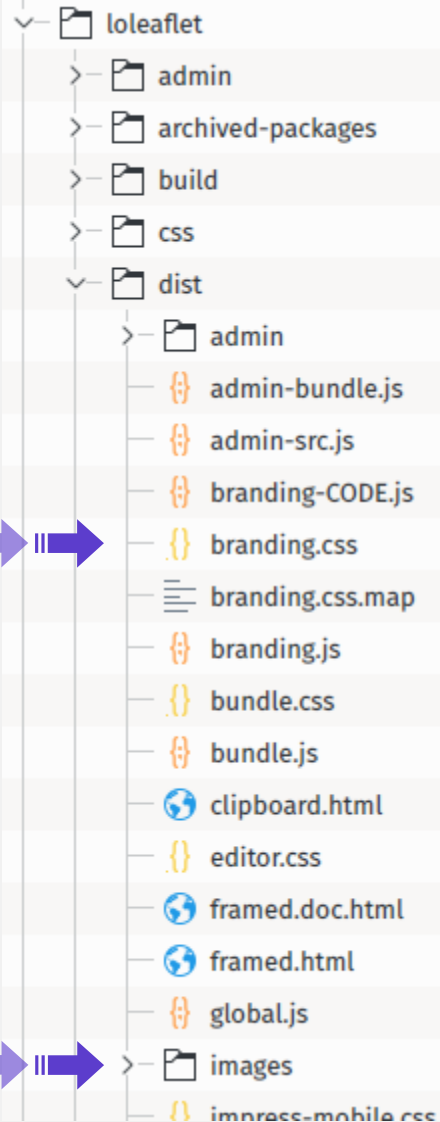
- One to rule them all?
- Could it be more efficient?
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- What if...

Get it at the Univention App Center

Grab CODE docker image from Docker

Packages for Linux x86-64 platform

Unstable snapshots



- Goal: easy to set up & easy to hack

→ Preparations before customizing it

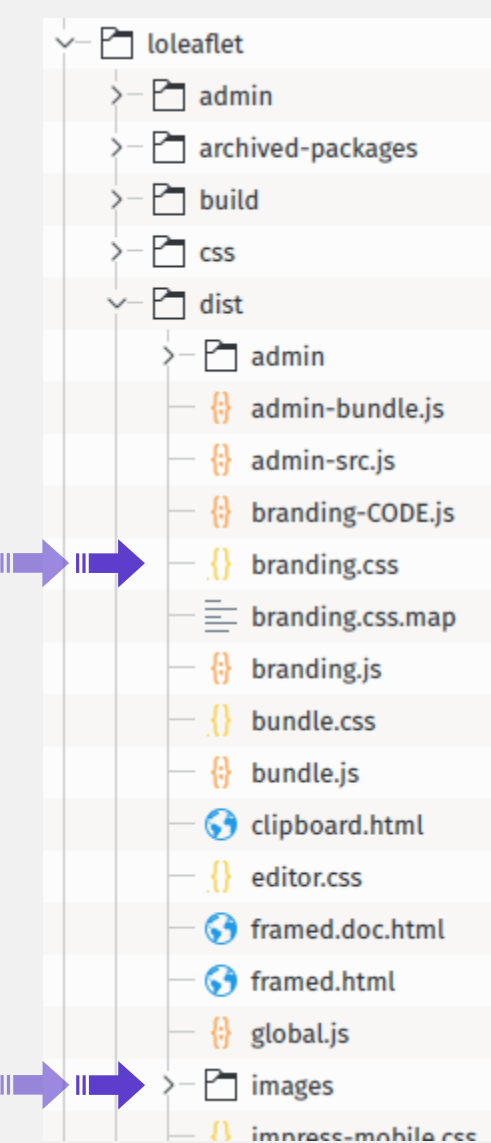
- One to rule them all? .
- Could it be more efficient?
- Improving workflow
- What if...

1) CollaboraOffice.com/CODE/

2) Verify that you have
CODE-brand package

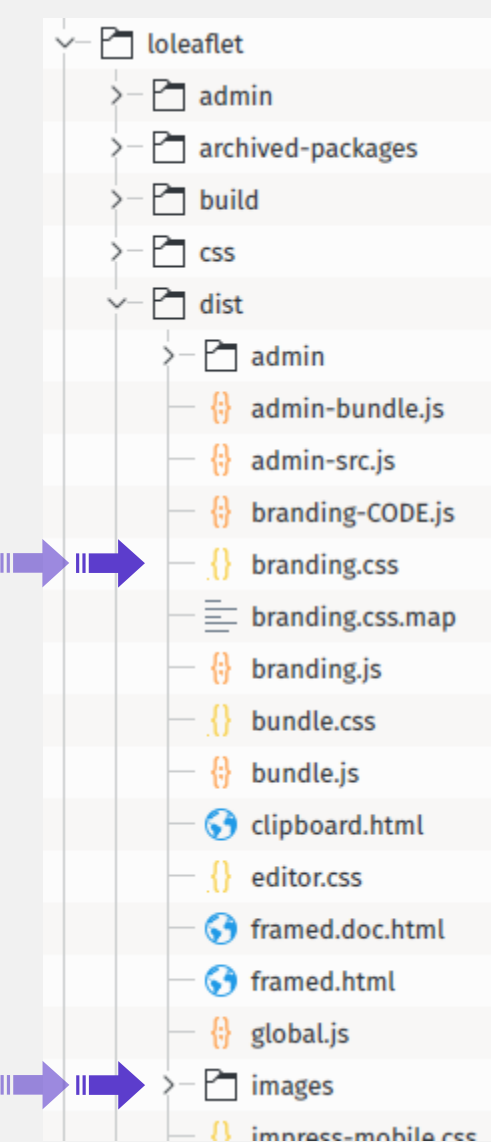
3) Inspect your Online directory

- `loleaflet / dist / branding.css`
- `loleaflet / dist / images /`



- Goal: easy to set up & easy to hack
- Preparations before customizing it
 - One to rule them all?
- Could it be more efficient?
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- What if...

- branding.css
 - 1 file for your customizations
 - Easy to play with
 - No further setup needed
- Images /
 - 1 folder to drop your icons



- Goal: easy to set up & easy to hack

- Preparations before customizing it

→ One to rule them all?

- Could it be more efficient?

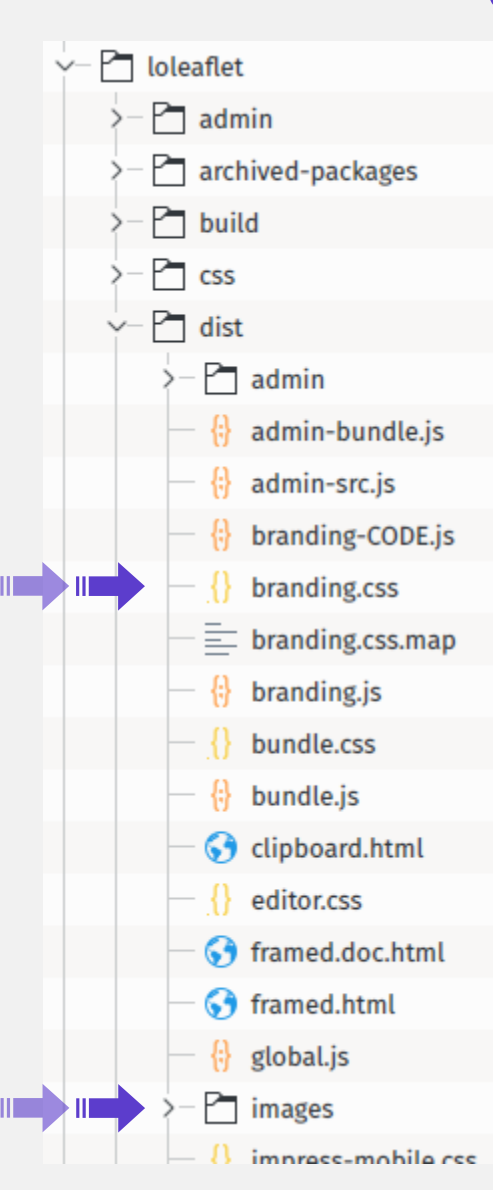
- Improving workflow

- What if...



potato

```
.w2ui-icon.numberformatcurrency {  
  background:url("images/your.svg"  
  no-repeat center !important;  
}
```



- Goal: easy to set up & easy to hack

- Preparations before customizing it

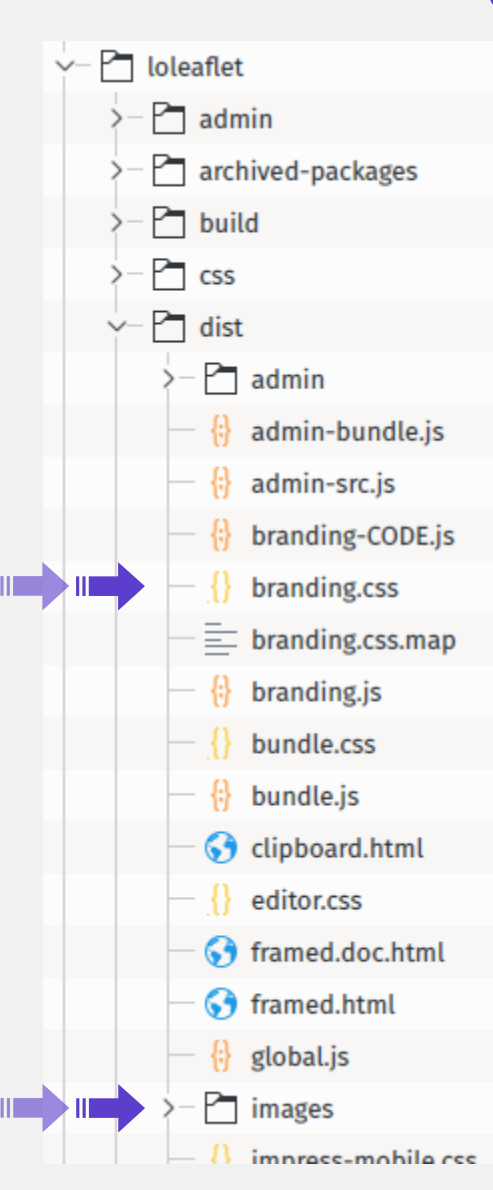
- One to rule them all?

→ Could it be more efficient?

- Improving workflow

- What if...

- Up to you, your workflow your decision
- Just update your branding.css
- But it can be difficult to manage multiple personal themes
- And to deal with repetition



- Goal: easy to set up & easy to hack

- Preparations before customizing it

- One to rule them all?

- Could it be more efficient?

→ Improving workflow

- What if...

- Choose any method that fits your needs, just be sure that:

- At end you have a branding.css file
- And your personal icons are copied to images/ directory



Word of advise

- You could divide it into smaller files
 - Helps to deal with components
 - Doesn't solve code repetitions
 - Doesn't solve maintainability problems
- Applying two or more class definition to an element.
 - Increases re-usability
 - Doesn't solve maintainability problems



Word of advise

- You could divide it into smaller files
 - Helps to deal with components
 - Doesn't solve code repetitions
 - Doesn't solve maintainability problems
- Applying two or more class definition to an element.
 - Increases re-usability
 - Doesn't solve maintainability problems

You would need
to alter your loleaflet directory

More files to edit (not just CSS)
More loose (and repeated) pieces



Word of advise

- You could divide definitions into smaller files

- Helps to deal with components

You would need
to alter your loleaflet directory

- Doesn't solve code repetitions

So keep it simple by using only the branding.css or...

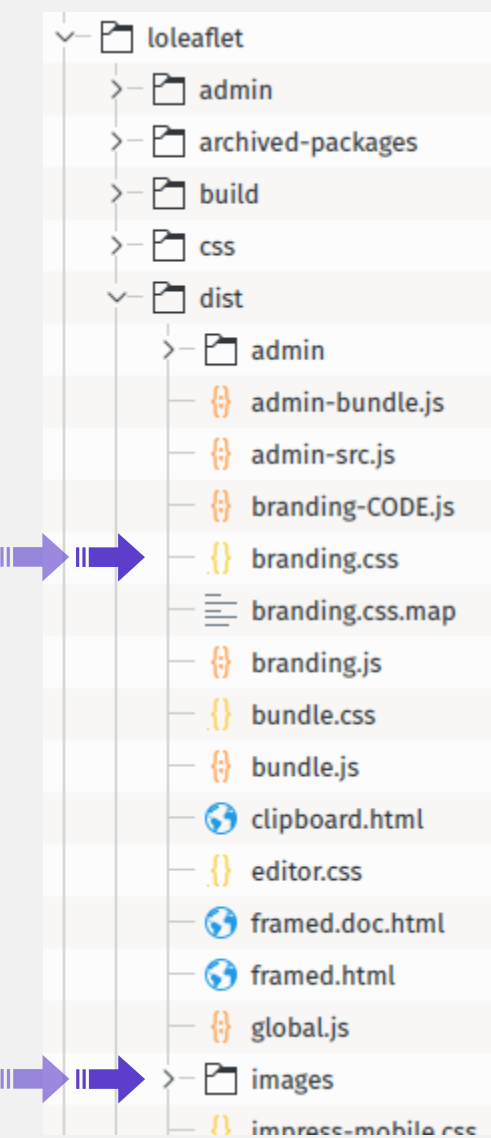
- Doesn't solve

- Applying two or more class definition to an element.

- Increases re-usability

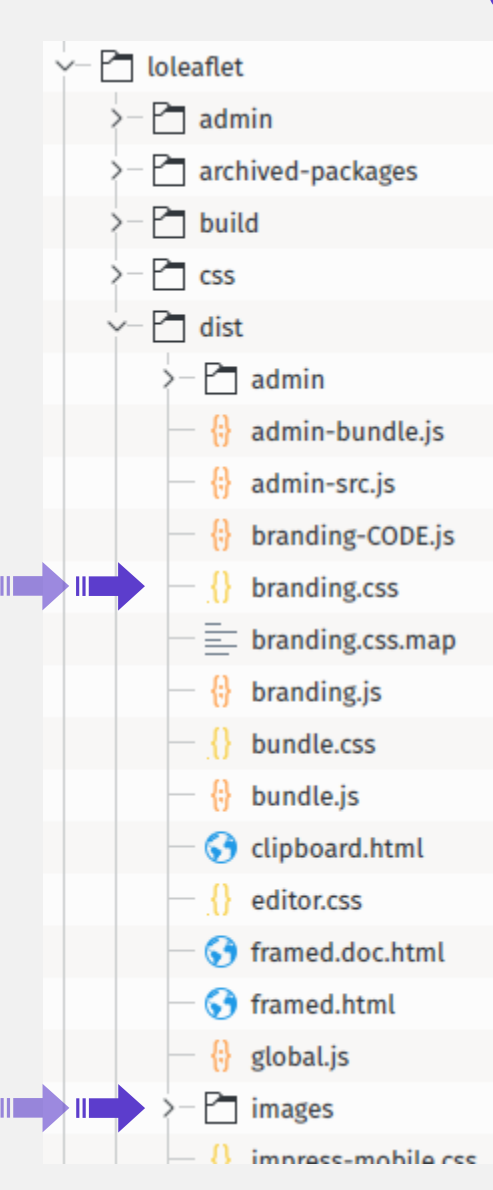
More files to edit (not just CSS)
More loose (and repeated) pieces

- Doesn't solve maintainability problems



- Goal: easy to set up & easy to hack
- Preparations before customizing it
- One to rule them all?
- Could it be more efficient?
- Improving workflow
- What if...

- You would use a CSS Pre-Processor?



- Goal: easy to set up & easy to hack
- Preparations before customizing it
- One to rule them all?
- Could it be more efficient?
- Improving workflow
- What if...

- You would use a CSS Pre-Processor?

While keeping online's structure intact

CSS Pre-Processor: uses a scripting language that is interpreted or compiled into Cascading Style Sheets (CSS). There is a multitude of scripting languages and respective syntaxes.



- Improving workflow
- What if...

- You would use a CSS Pre-Processor?

While keeping online's structure intact

CSS Pre-Processor: uses a scripting language that is interpreted or compiled into Cascading Style Sheets (CSS). There is a multitude of scripting languages and respective syntaxes. To simplify let's focused on one



- Improving workflow
- What if...

- You would use a CSS Pre-Processor?

While keeping online's structure intact



Advantages

- It tells you when something is wrong, or missing. It can watch the source files for changes, and re-compile CSS each time.
- Since it's a scripting language, it allows **variables**, **functions** and other things (such as for example **mixins**) that helps avoiding repetition and make it easier to maintain
- Can be used via terminal and so you can automate this process with scripts etc
- Forget about **vendor**-specific properties
- Decrease the amount of code
- Browsers allow you to debug using directly with **Source maps**.



Advantages

- It tells you how to change CSS
 - Since it's just CSS, as for editing and maintaining
 - Can be used with Source maps
- Source maps:** files that tell browsers or other tools that consume CSS how that CSS corresponds to the Sass files from which it was generated. They make it possible to see and even edit your Sass files in browsers. See instructions for using source maps with your:
- Chrome: col.la/sassonchrome
 - Firefox: col.la/sassonff
- Forget about **vendor**-specific properties
 - Decrease the amount of code
 - Browsers allow you to debug using directly with Source maps



How to install

- Simple to setup with many options

- Node.js `npm install -g sass`

the official JS implementation

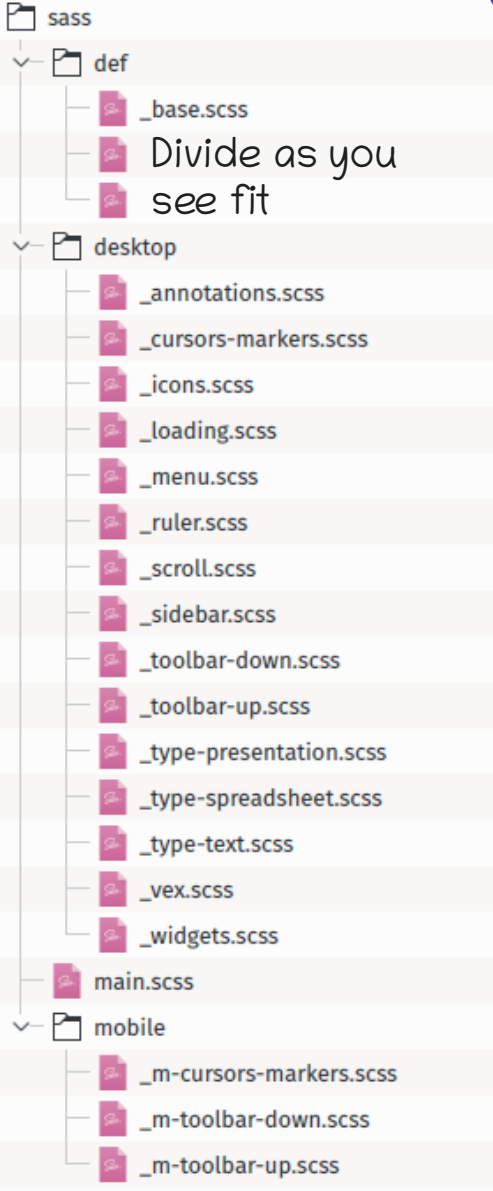
- Ruby: install `ruby-sass` and `sudo gem install sass-listen`

The original implementation

- DART:

The primary implementation of Sass

- Download package <https://github.com/sass/dart-sass/releases>
 - Extract it to your home folder
 - Add `'export PATH=~/.dart-sass:$PATH'` to `~/.bashrc`



How could you structure it

- It's really up to you as long as the result is one CSS file
- On the left for example, files are organized by
 - desktop/, mobile/: components
 - def/: All definitions and theme-specific colours etc
 - E.G.: having a variable `$theme` that you set depending on which theme you want or simply by having just one theme included at a time
 - And main.scss is where all other files are imported/included





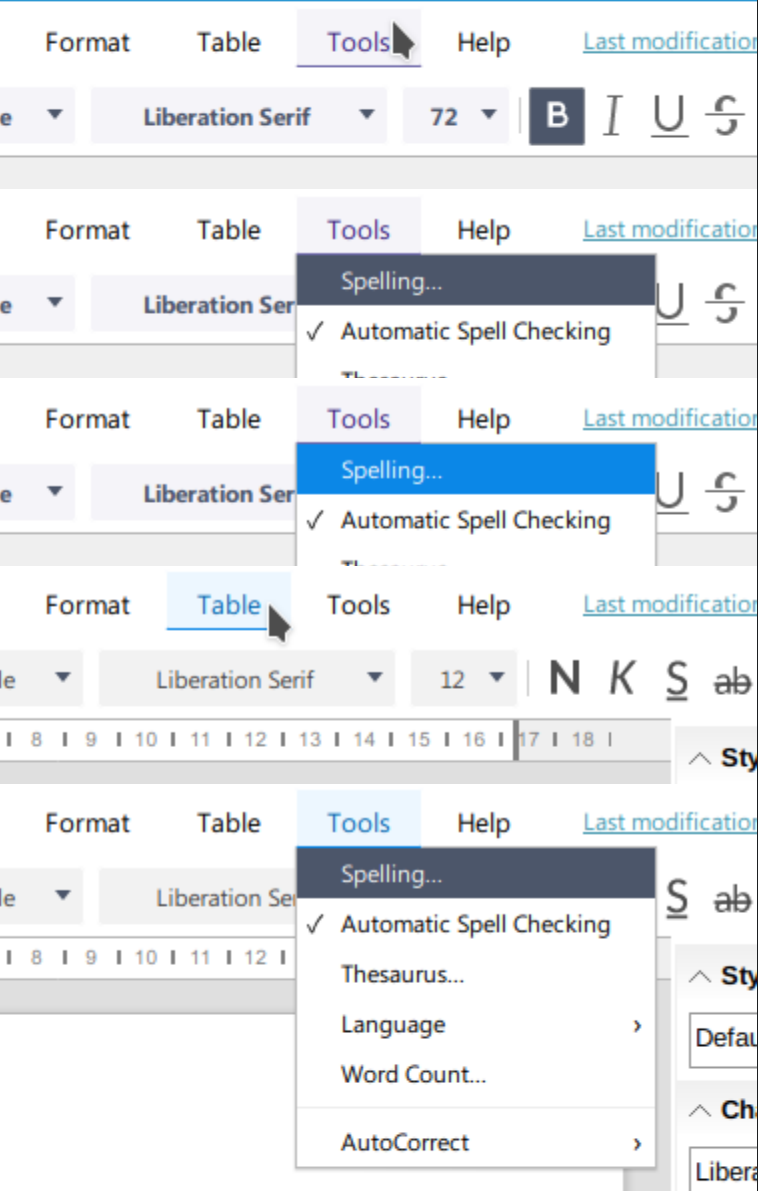
How to run

```
sass --watch main.scss:./online/loleaflet/dist/branding.css  
      :../online/loleaflet/dist/branding.css
```

- Add a `--poll` flag to tell `--watch` to use a polling watcher rather than the native OS's watcher.
- Add a `--watch` flag to update files like `--update`, then continue to watch the sources
- Add `--style=expanded` flag (default, not needed) or `--style=compressed` to have all the spaces removed and thus a compressed CSS file.



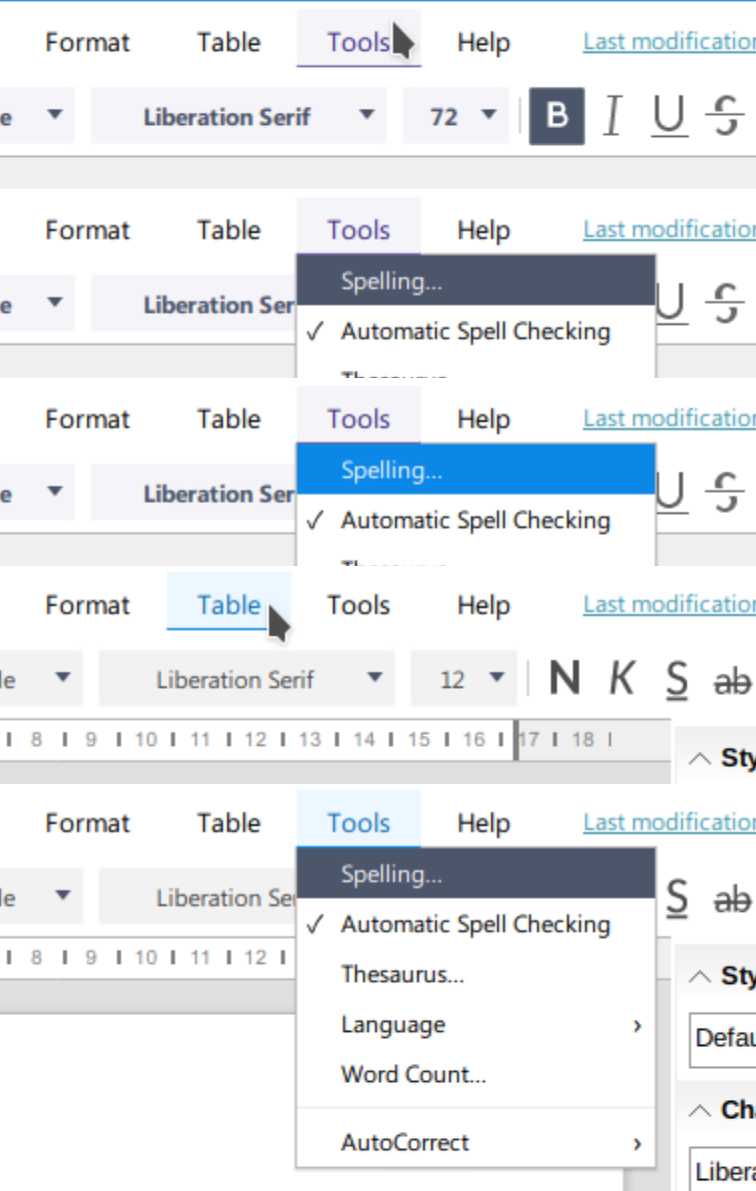
Example: toolbars



```
/*drop-down menu*/
```

_toolbar-up.scss

```
.select2-container--default .select2-selection--single{  
  >> @include base.toolbar-up-dropdown(base.$theme);  
  >> border-radius: 3px;  
}  
  
.select2-container--default .select2-selection--single:ho  
  >> @include base.toolbar-up-dropdown-hover(base.$theme)  
}  
  
.select2-container--below.select2-container--open .select  
  >> @include base.toolbar-up-dropdown-open(base.$theme);  
}  
  
/* select (arrow and radius)*/  
.select2-container--default .select2-selection--single .  
  >> @include base.toolbar-up-dropdown-chevron(base.$theme)  
}  
  
.w2ui-toolbar table.w2ui-button{  
  >> border-radius: 2px;  
}
```



```
/*drop-down menu*/-
```

_toolbar-up.scss

```
.select2-container--default .select2-selection--single{-  
  >> @include base.toolbar-up-dropdown(base.$theme);-  
  >> border-radius: 3px;-
```

```
@mixin toolbar-up-dropdown($theme){-  
  >> @if $theme == 'yourtheme1' {-  
    >> border-color: #fff;-  
    >> background-color: #8c86bc17;-  
    >> border-radius: 3px;-  
  } @else if $theme == 'yourtheme2' {-  
    >> border-color: #fcfcfc;-  
    >> background-color: #f2f2f2;-  
    >> border-radius: 1px;-  
  }-  
}
```

_base.scss

Make it yours!

FORMAT CELLS

Numbers Font Font Effects Alignment Asian Typography Borders Background Cell Protection

Line Arrangement

Presets: [Icons]

User-defined: [Icon]

Line

Style: [Dashed Line]

Width: [Input]

Padding

Left: 1.0 pt [Minus] [Plus]

Right: 1.0 pt [Minus] [Plus]

FORMAT CELLS

Numbers Font Font Effects Alignment Asian Typography Borders Background Cell Protection

Line Arrangement

Presets: [Icons]

User-defined: [Icon]

Line

Style: [Input]

Width: [Input]

Padding

Left: [Minus] 1.0 pt [Plus]

Right: [Minus] [Plus]

FORMAT CELLS

Numbers Font Font Effects Alignment Asian Typography Borders Background Cell Protection

Line Arrangement

Presets: [Icons]

User-defined: [Icon]

Line

Style: [Dashed Line]

Width: 3.75 pt [Input]

Color: Blue [Dropdown]

Padding

Left: 1.0 pt [Input]

Right: 1.0 pt [Input]

Top: 1.0 pt [Input]

Bottom: 1.0 pt [Input]

☒ Synchronize

Shadow Style

Position: [Icons]

Distance: 5 pt [Input]

Color: Gray [Dropdown]

File Edit View Insert Format Table Tools Help Last modification: 1 minute ago

Default Style

Text

Text orientation

Spacing

Align

Lists

Character...

Paragraph...

Bullets and Numbering...

Page...

Sections...

Position and Size...

Line...

Area...

Watermark...

Columns...

Clear Direct Formatting

File Edit View Insert Format Table Tools Help Last m

Default Style Liberation Se

2 1 1 1 1 2 3 4 5 6 7 8 9 10 11 12 1

Hello world

Tools Help Last m

Spelling...

Automatic Spell Checking

Thesaurus...

Language

Word Count...

AutoCorrect

Tools Help Last m

Spelling...

Automatic Spell Checking

Thesaurus...

Language

Word Count...

AutoCorrect





Pedro Pinto Silva

@PedroPS @CollaboraOffice

CollaboraOffice.com

CollaboraOffice.com/CODE

**| Open Source,
| Open First**