



FOSDEM 2020

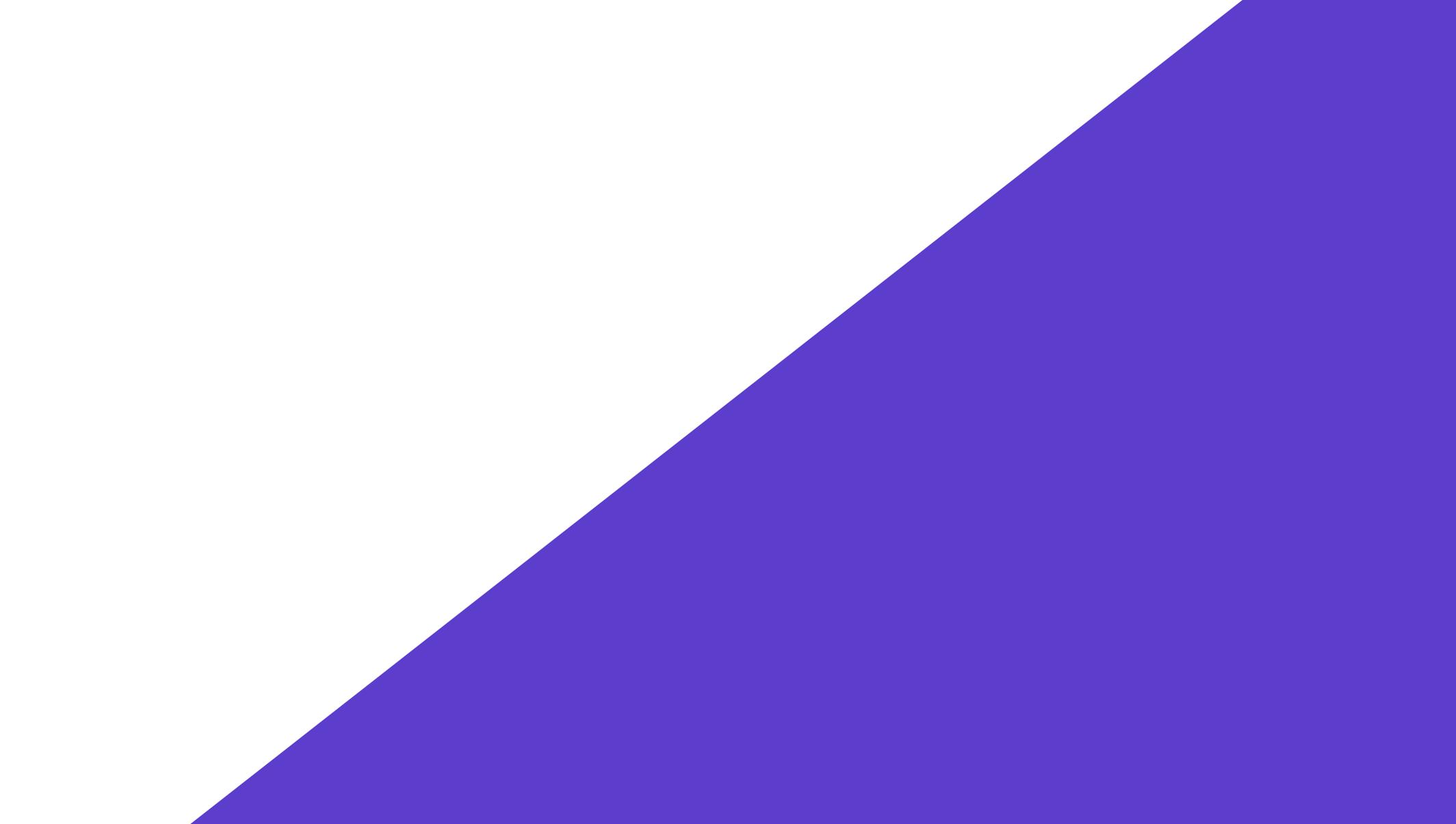
Make Online yours: How to customize Collabora Online

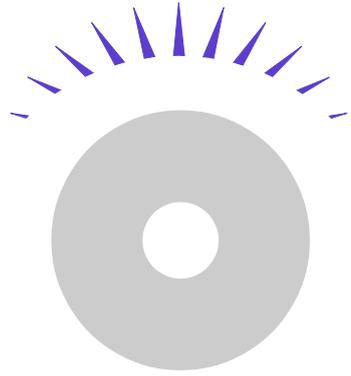
By Pedro Pinto Silva

Designer at Collabora Productivity

@PedroPS @CollaboraOffice







Customizing

XML

CSS

SVG

XML

CSS

SVG

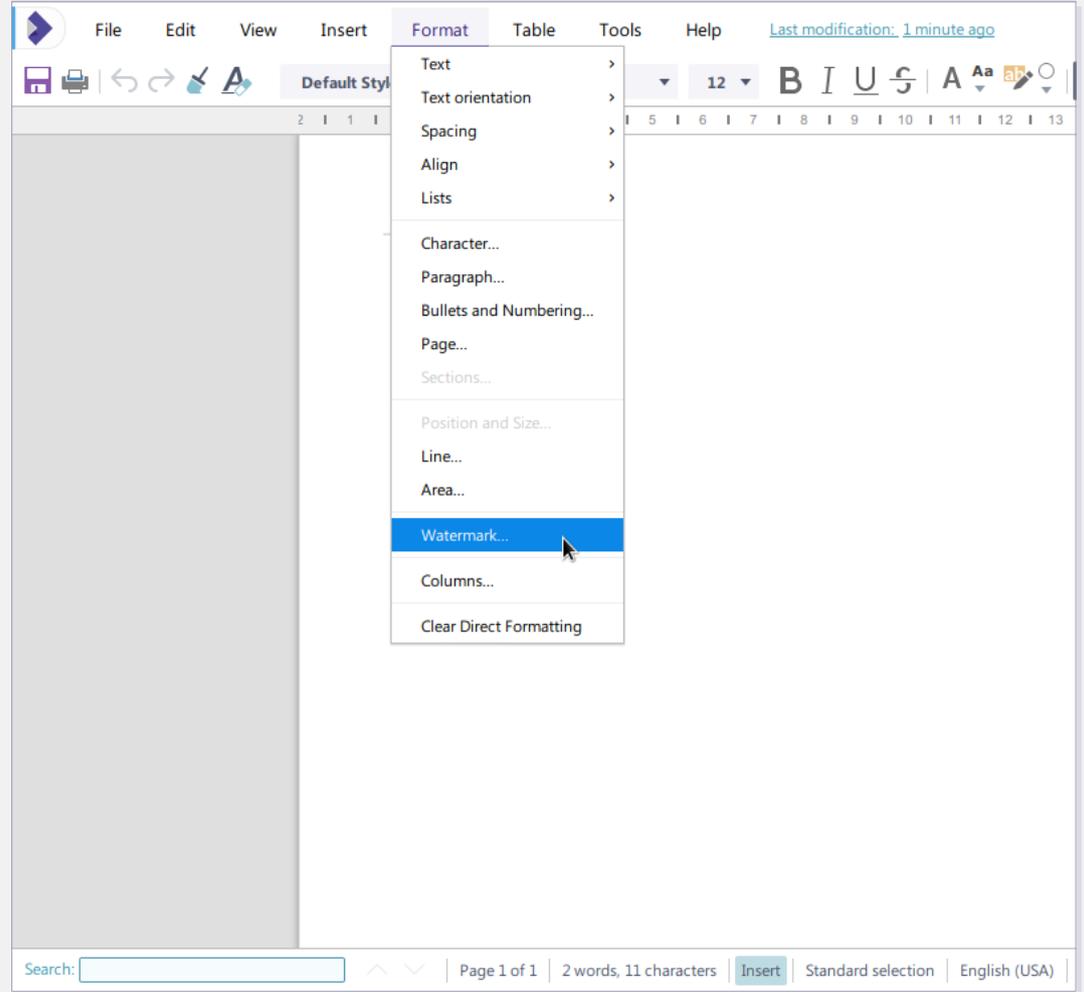
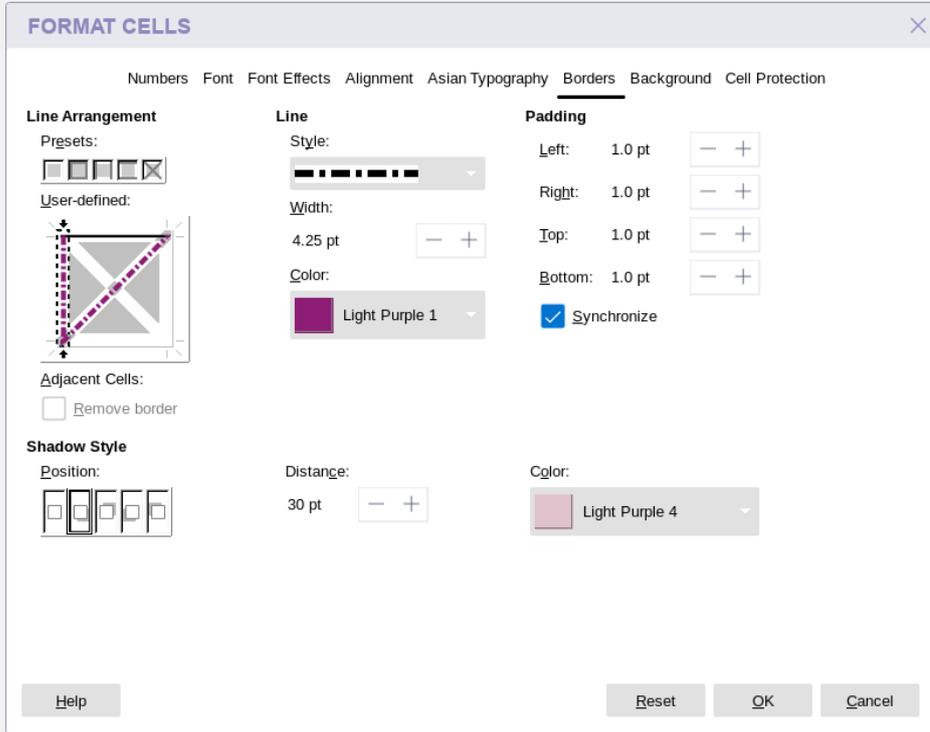


XML

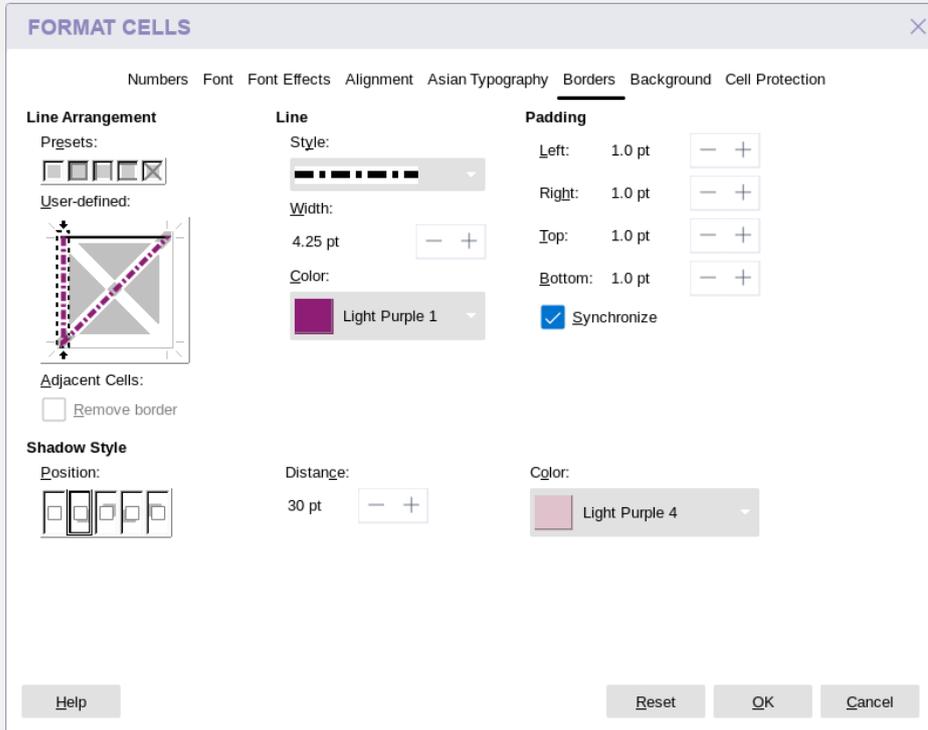
CSS

SVG

Widgets and overall theme



Widgets



→ Widgets are customizable

→ Uses new extended instance of NWF¹

→ Draws interface depending on a definition

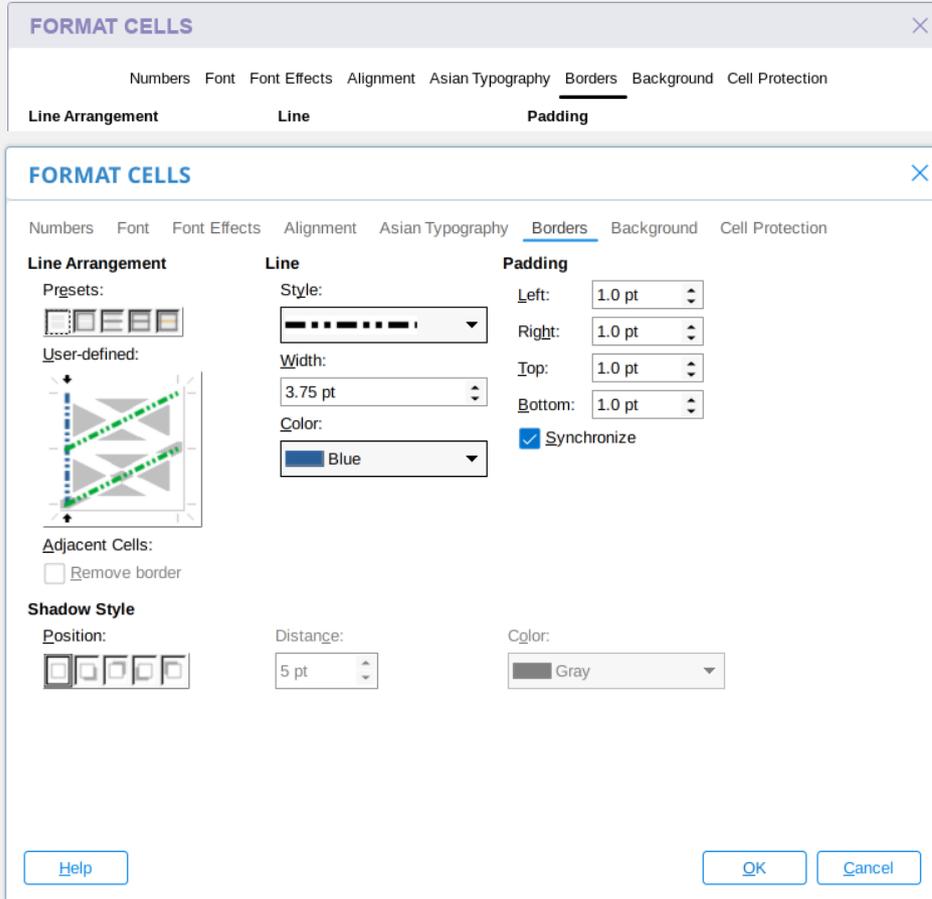
→ It allows multiple definitions

→ = multiple themes

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

→ Sponsored work by Adfinis for iOS

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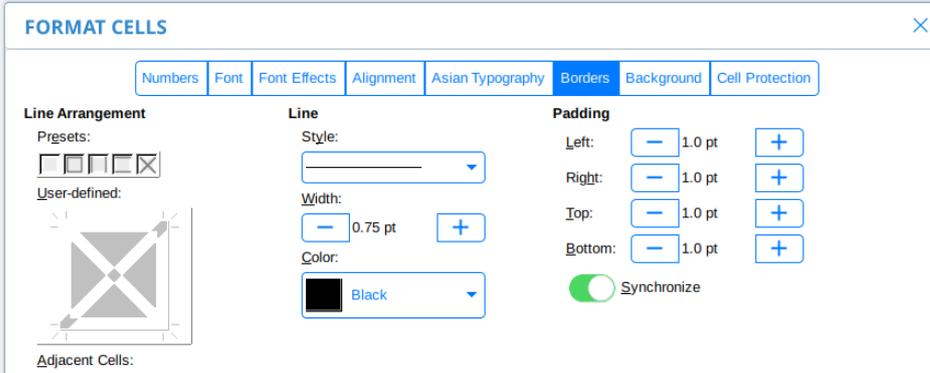
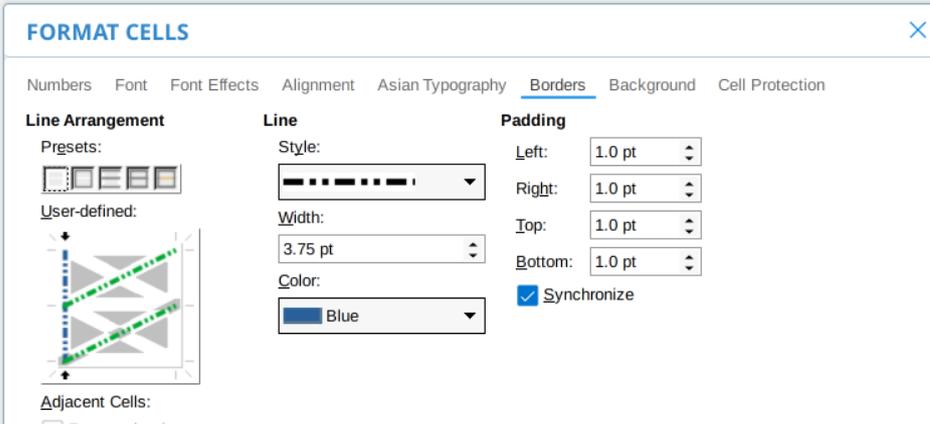
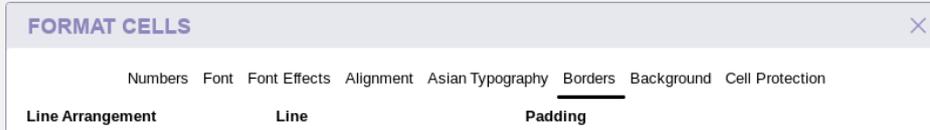
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1) Tomaž Vajngerl's presentation
col.la/libocon2019vajngerl

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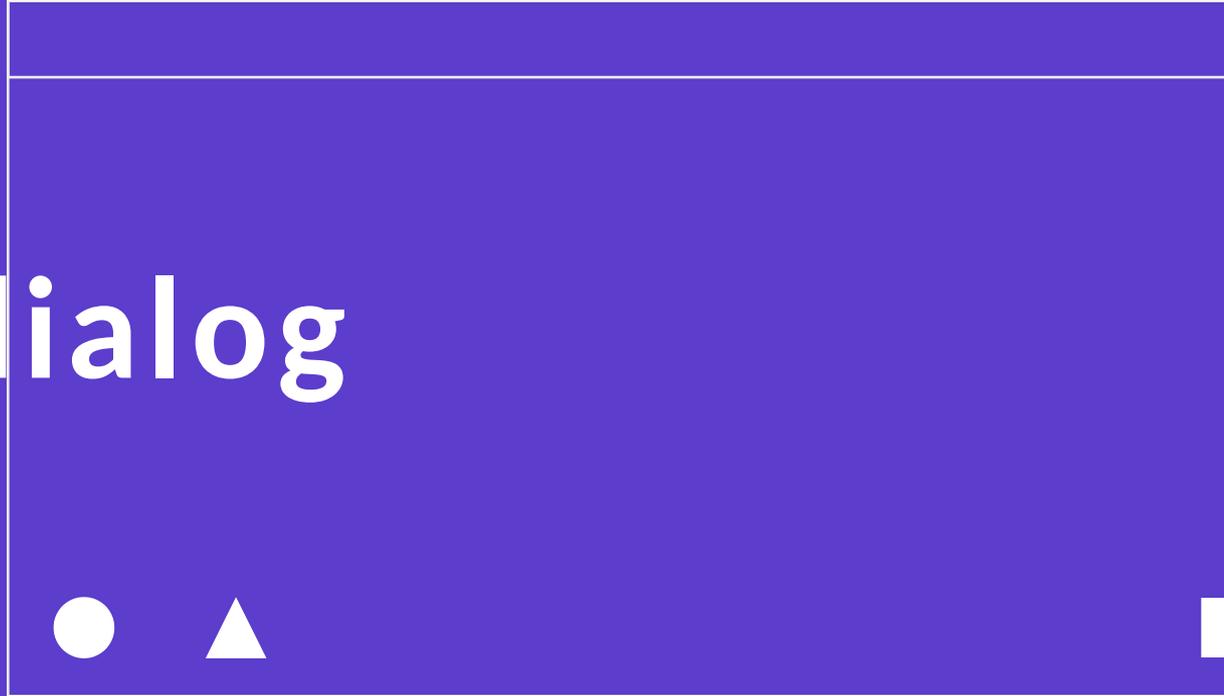
→ = multiple themes

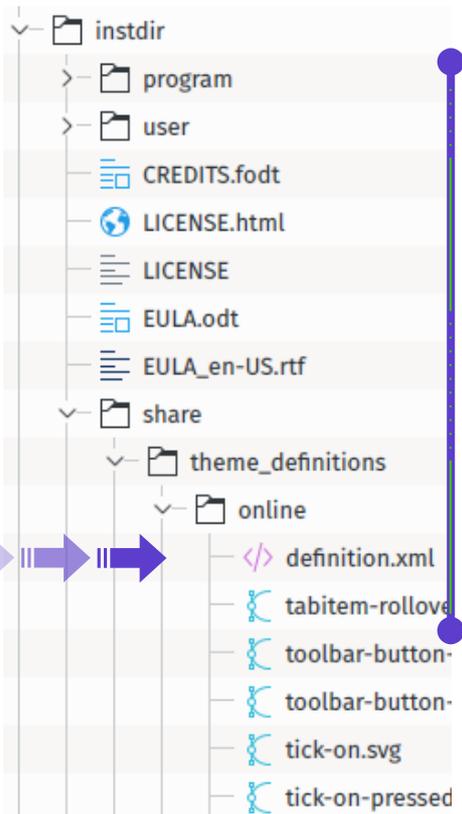
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Example: dialog



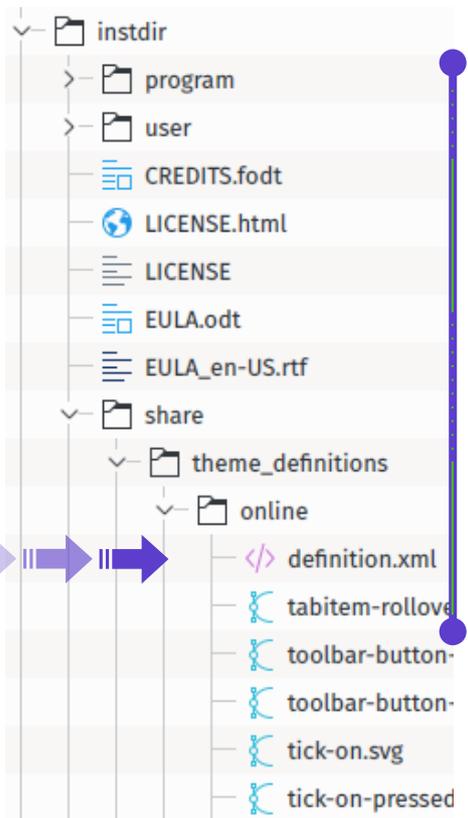
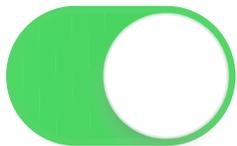


Colours

```

<widgets>
  <style>
    <faceColor value="#F7F7F7"/>
    <checkedColor value="#C0C0C0"/>
    <lightBorderColor value="#F7F7F7"/>
    [...]
    <fontColor value="#000000"/>
  </style>

```



Settings

```
<settings>
```

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

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

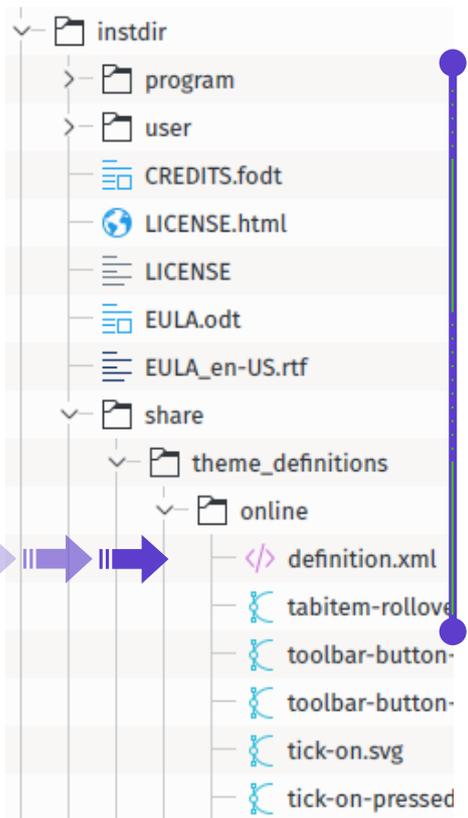
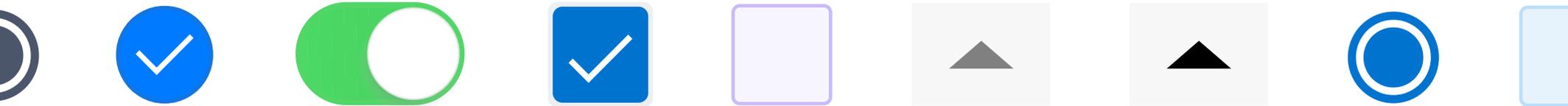
```
<listBoxEntryMargin value="0"/>
```

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

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

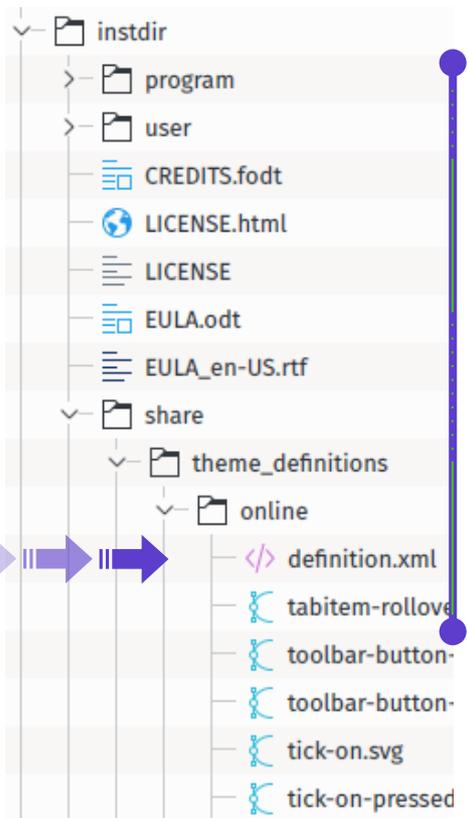
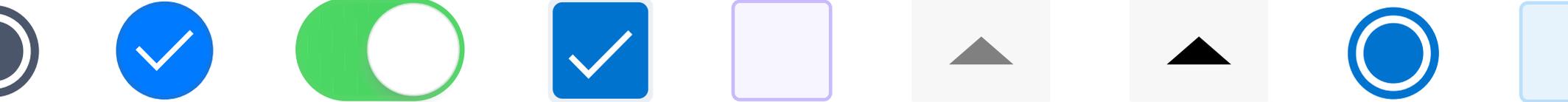
```
[...]
```

```
</settings>
```



Element

```
<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="fa<  
      <image source="radio-off.svg" />  
    </state>  
    <state enabled="true" pressed="true" button-value="fals<  
      <image source="radio-off-pressed.svg" />  
    </state>  
  </part>  
</radiobutton>
```



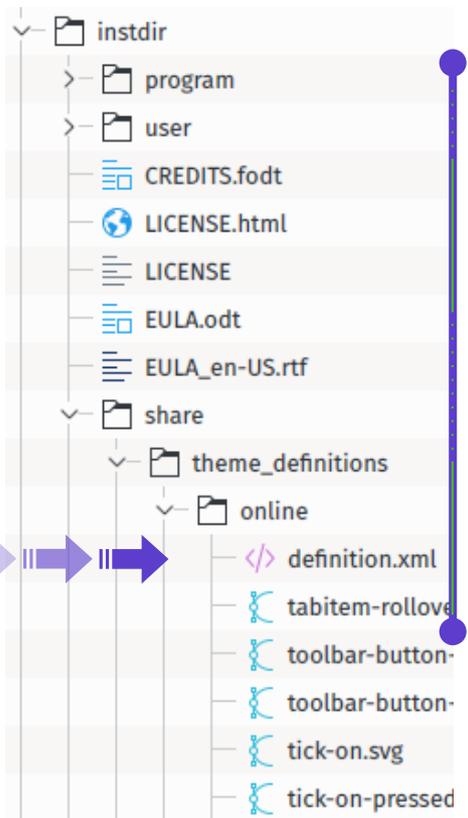
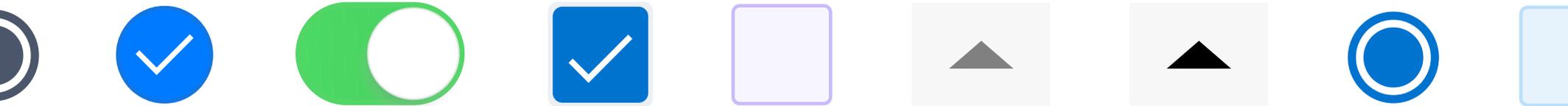
```
<radiobutton type="radio" value="Entire" width="20" height="20" state="true" pressed="false" button-value="true" >
  <state enabled="true" pressed="false" button-value="true" >
    <image source="radio-on.svg" />
  </state>
  <state enabled="true" pressed="true" button-value="true" >
    <image source="radio-on-pressed.svg" />
  </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>
</radiobutton>
```

Element

part

type

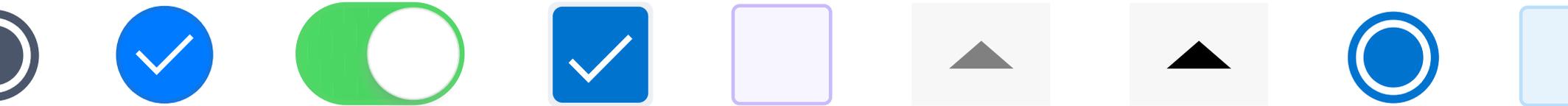
state



Element

```
<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="fa<...>  
      <image source="radio-off.svg" />  
    </state>  
    <state enabled="true" pressed="true" button-value="fals<...>  
      <image source="radio-off-pressed.svg" />  
    </state>  
  </part>  
</radiobutton>
```

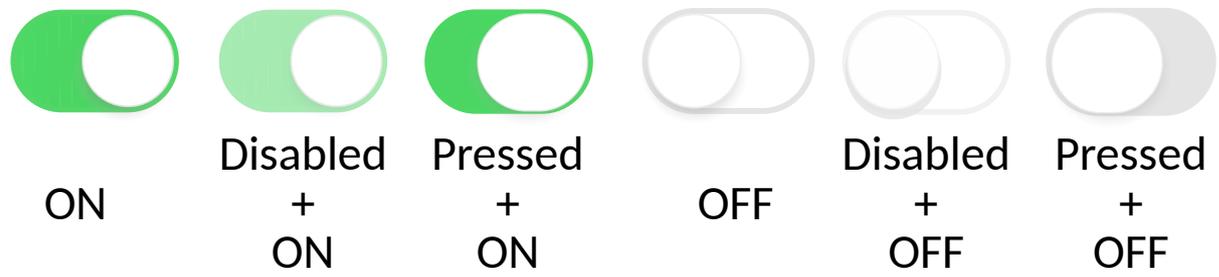
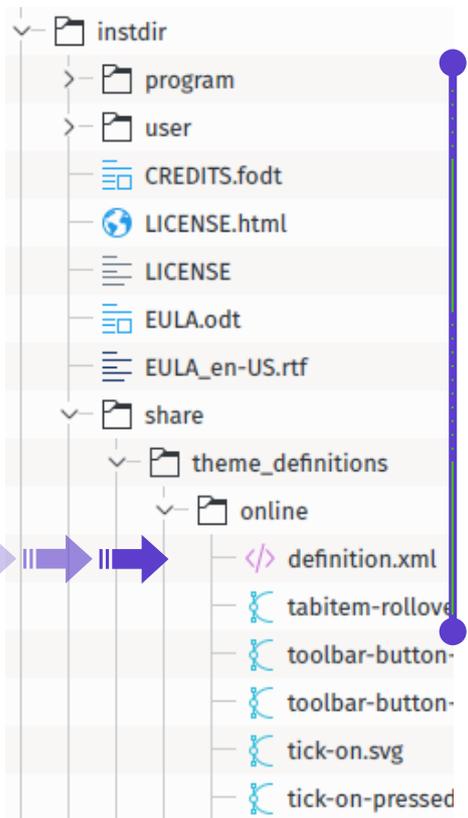




Supported states: enabled, focused, pressed, rollover, default, selected, button-value, extra

Multiple states can be active at the same time

- But it always resolves to one solution



Widgets and overall theme

FORMAT CELLS [Close]

Numbers Font Font Effects Alignment Asian Typography **Borders** Background Cell Protection

Line Arrangement Line **Padding**

FORMAT CELLS [Close]

Numbers Font Font Effects Alignment Asian Typography **Borders** Background Cell Protection

Line Arrangement **Line** **Padding**

Presets: [Icons]

User-defined: [Diagram]

Adjacent Cells:

Line

Style: [Dropdown]

Width: 3.75 pt

Color: Blue

Padding

Left: 1.0 pt

Right: 1.0 pt

Top: 1.0 pt

Bottom: 1.0 pt

Synchronize

FORMAT CELLS [Close]

Numbers Font Font Effects Alignment Asian Typography **Borders** Background Cell Protection

Line Arrangement **Line** **Padding**

Presets: [Icons]

User-defined: [Diagram]

Adjacent Cells:

Line

Style: [Dropdown]

Width: 0.75 pt

Color: Black

Padding

Left: 1.0 pt

Right: 1.0 pt

Top: 1.0 pt

Bottom: 1.0 pt

Synchronize

File Edit View Insert **Format** Table Tools Help [Last modification: 1 minute ago](#)

Default Style

2 | 1 | 1

5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13

- Text >
- Text orientation >
- Spacing >
- Align >
- Lists >
- Character...
- Paragraph...
- Bullets and Numbering...
- Page...
- Sections...
- Position and Size...
- Line...
- Area...
- Watermark...**
- Columns...
- Clear Direct Formatting

Search: [Input] | Page 1 of 1 | 2 words, 11 characters | **Insert** | Standard selection | English (USA)

Widgets and overall theme

FORMAT CELLS [Close]

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Numbers Font Font Effects Alignment Asian Typography **Borders** Background Cell Protection

Line Arrangement Prssets: [Icons] User-defined: [Diagram]

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Padding Left: 1.0 pt Right: 1.0 pt Top: 1.0 pt Bottom: 1.0 pt Synchronize

Adjacent Cells:

FORMAT CELLS [Close]

Numbers Font Font Effects Alignment Asian Typography **Borders** Background Cell Protection

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File Edit View Insert **Format** Table Tools Help [Last modification: 1 minute ago](#)

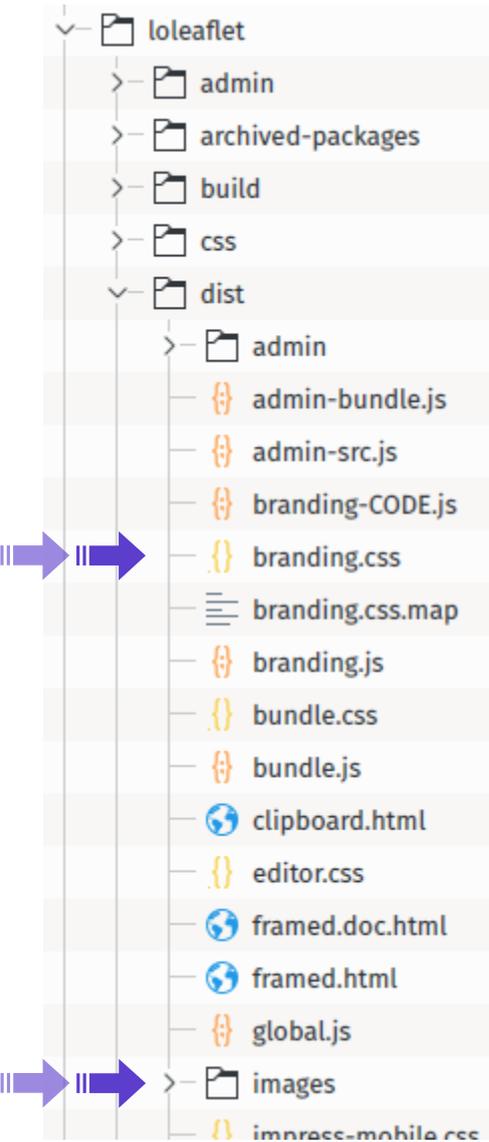
Default Style

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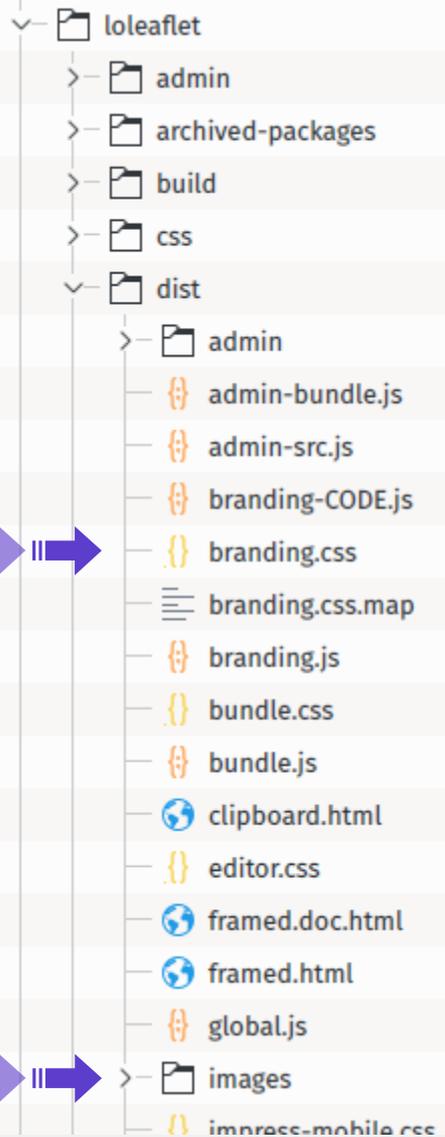
- Text >
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- Page...
- Sections...
- Position and Size...
- Line...
- Area...
- Watermark...**
- Columns...
- Clear Direct Formatting

Search: [Input] | 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/

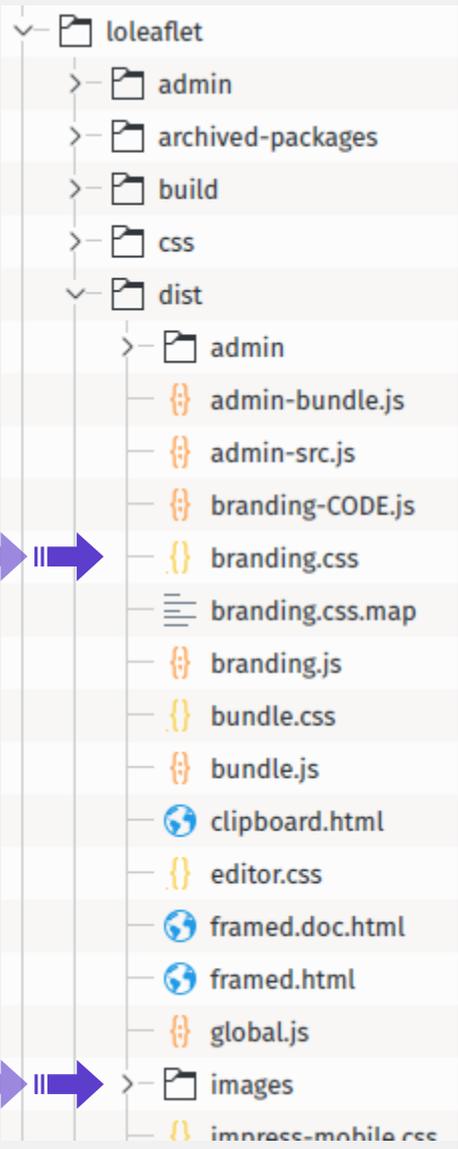
- One to rule them all?
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- What if...

[Get it at the Unvention App Center](#)

[Grab CODE docker image from Docker](#)

[Packages for Linux x86-64 platform](#)

[Unstable snapshots](#)



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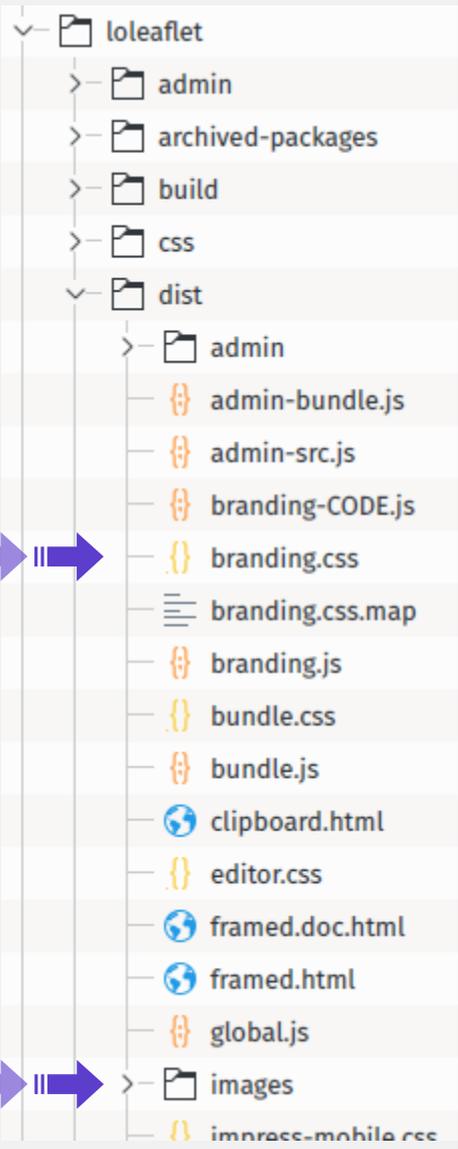
1) CollaboraOffice.com/CODE/

2) Verify that you have CODE-brand package

3) Inspect your Online directory

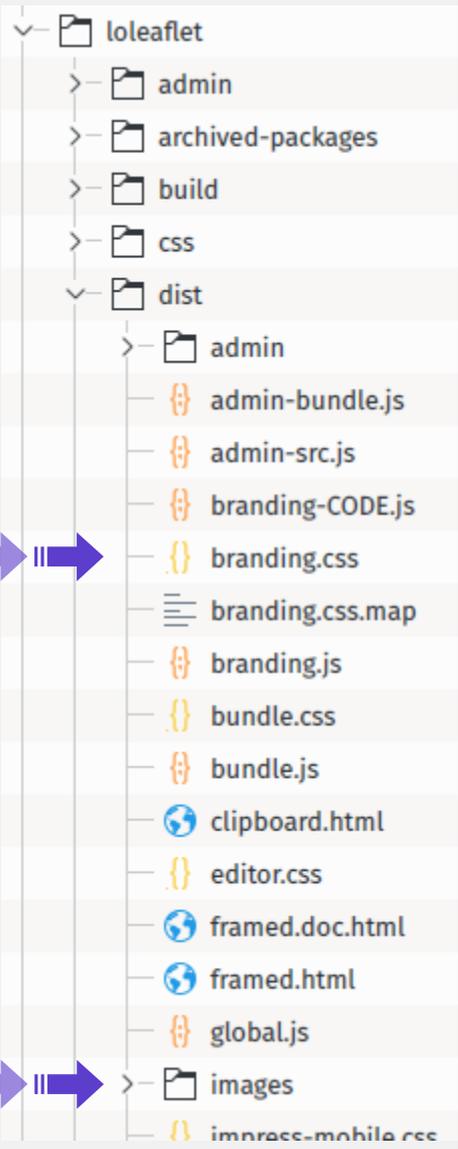
- loleaflet / dist / branding.css

- loleaflet / dist / images /



- Goal: easy to set up & easy to hack
- Preparations before customizing it
 - One to rule them all?
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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

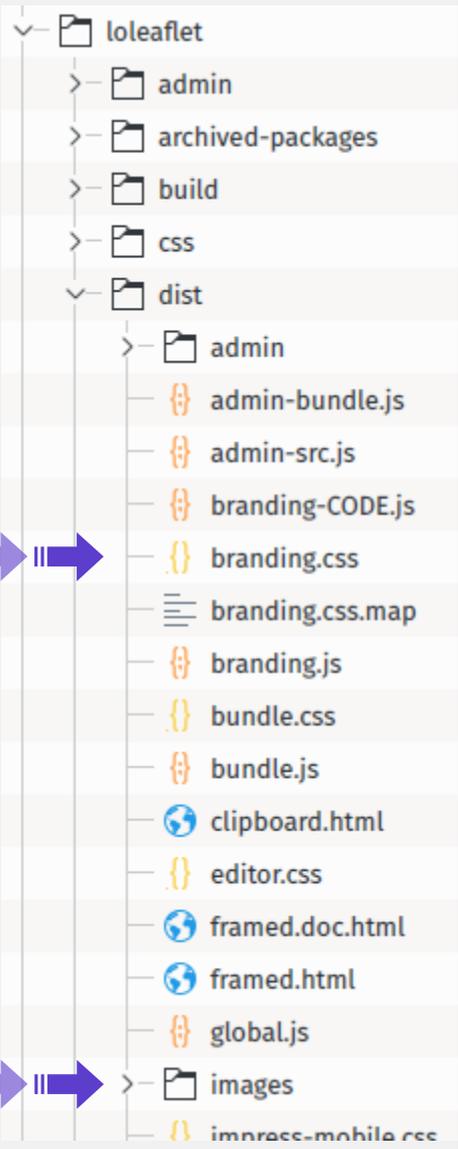
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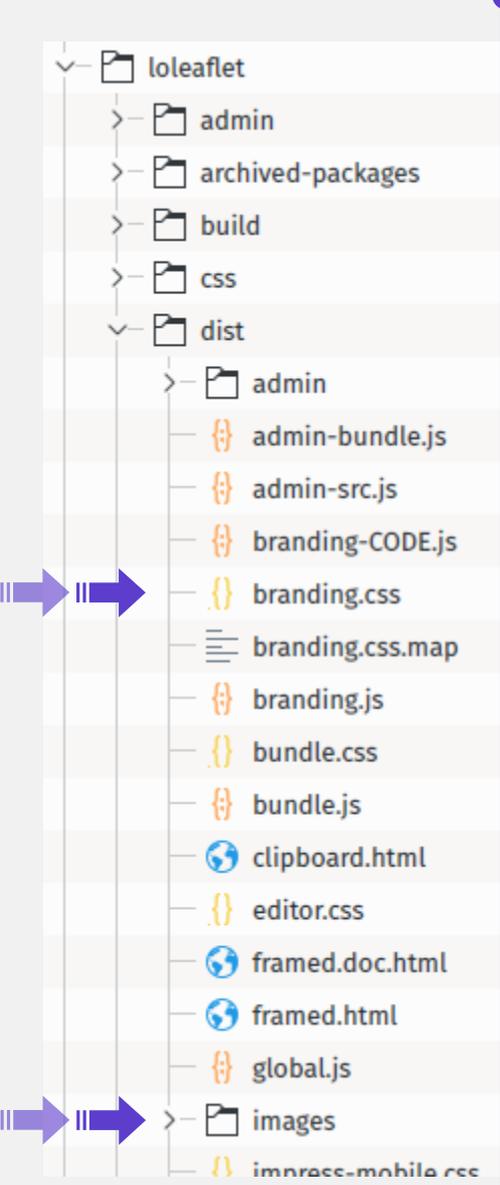
potato

```
.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
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- 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

- Doesn't solve

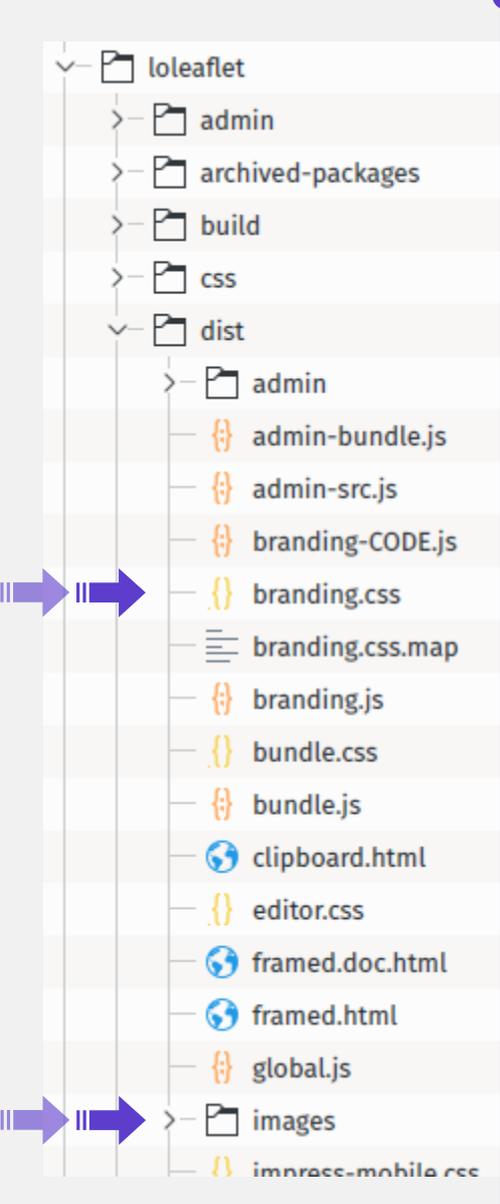
So keep it simple by using only the branding.css or...

- Applying two or more class definition to an element.

- Increases re-usability

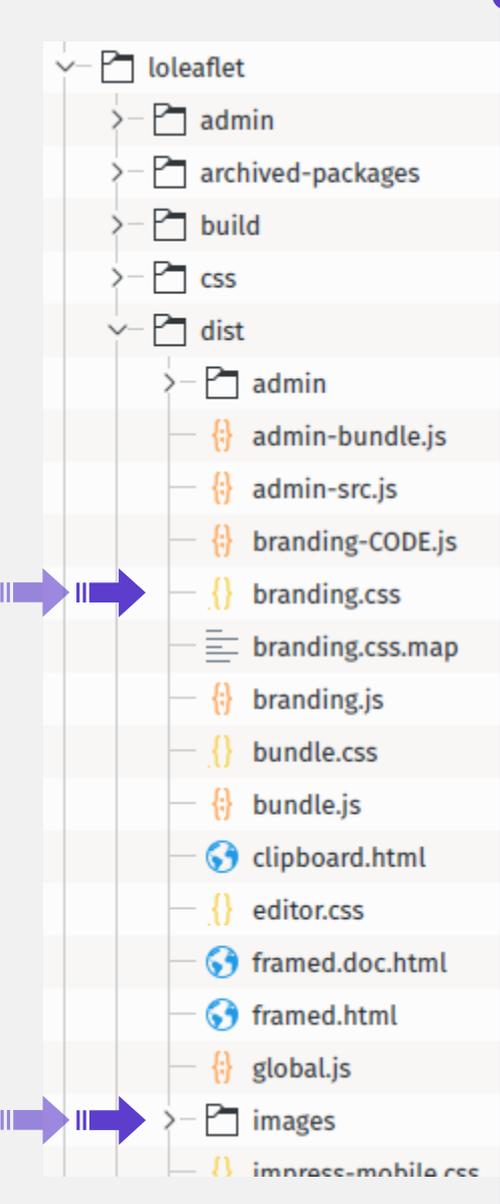
More files to edit (not just CSS)
More loose (and repeated) pieces

- Doesn't solve maintainability problems



- Goal: easy to set up & easy to hack
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- What if...

- You would use a CSS Pre-Processor?



- Goal: easy to set up & easy to hack
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- You would use a CSS Pre-Processor?

While keeping online's structure intact

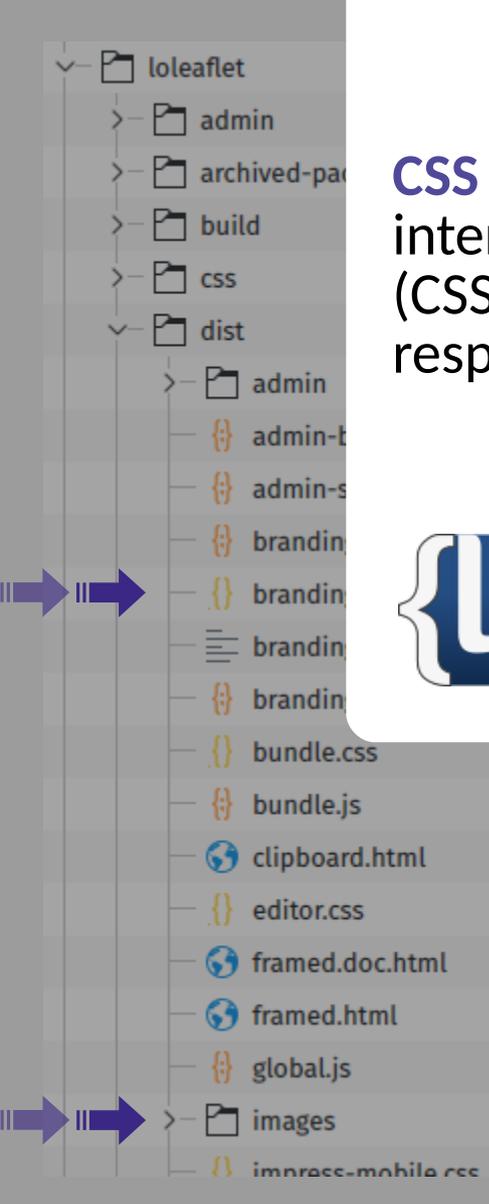


CSS Pre-Processor: uses a scripting language that is interpreted or compiled into Cascading Style Sheets (CSS). There is a multitude of scripting languages and respective syntaxes.



- Improving workflow
- What if...

- You would use a CSS Pre-Processor?
While keeping online's structure intact



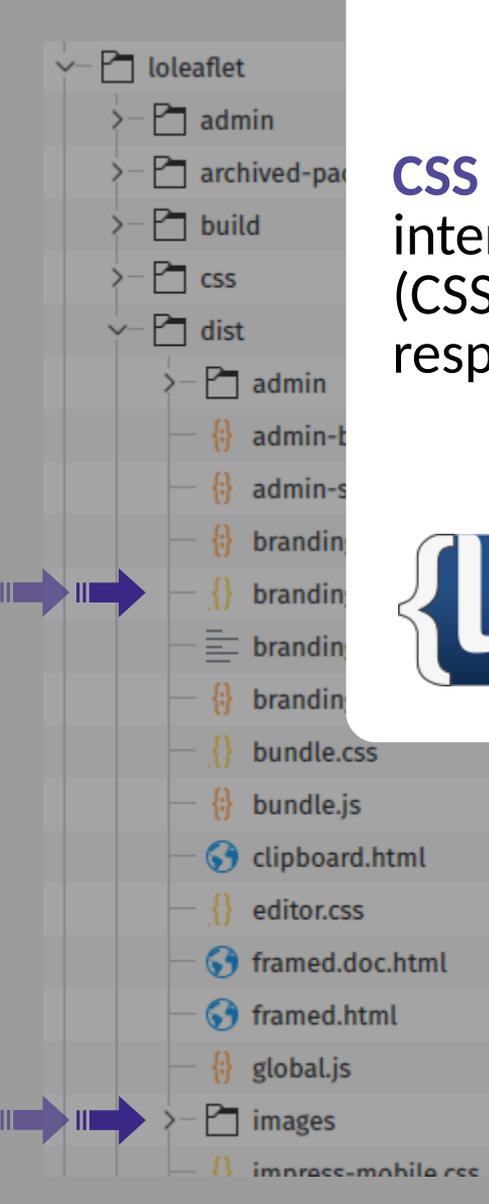


CSS Pre-Processor: uses a scripting language that is interpreted or compiled into Cascading Style Sheets (CSS). There is a multitude of scripting languages and respective syntaxes. To simplify let's focused on one



- 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
 - Since it's as for e maintain
 - Can be
 - Forget about **vendor**-specific properties
 - Decrease the amount of code
 - Browsers allow you to debug using directly 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



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

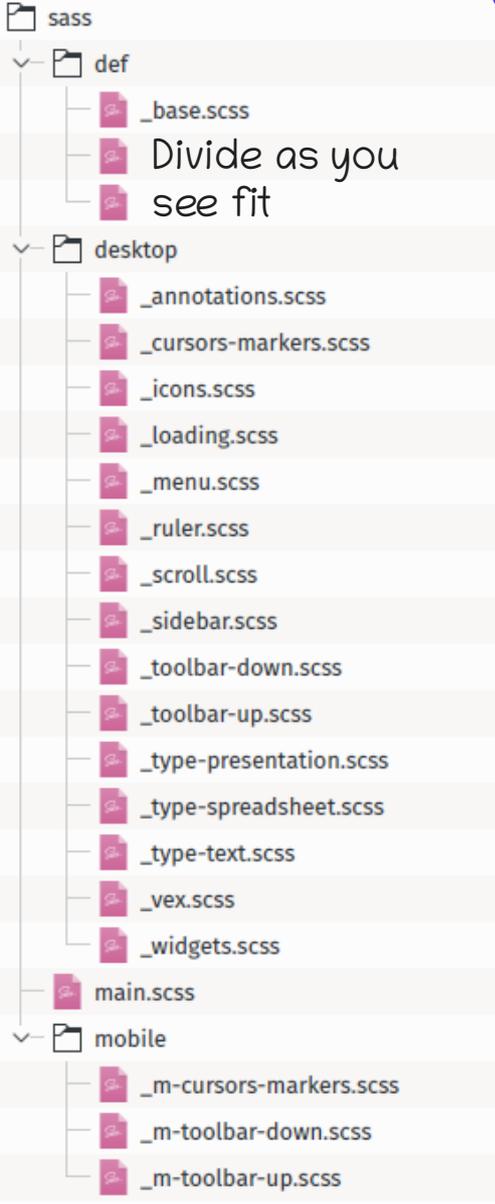
- DART:

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





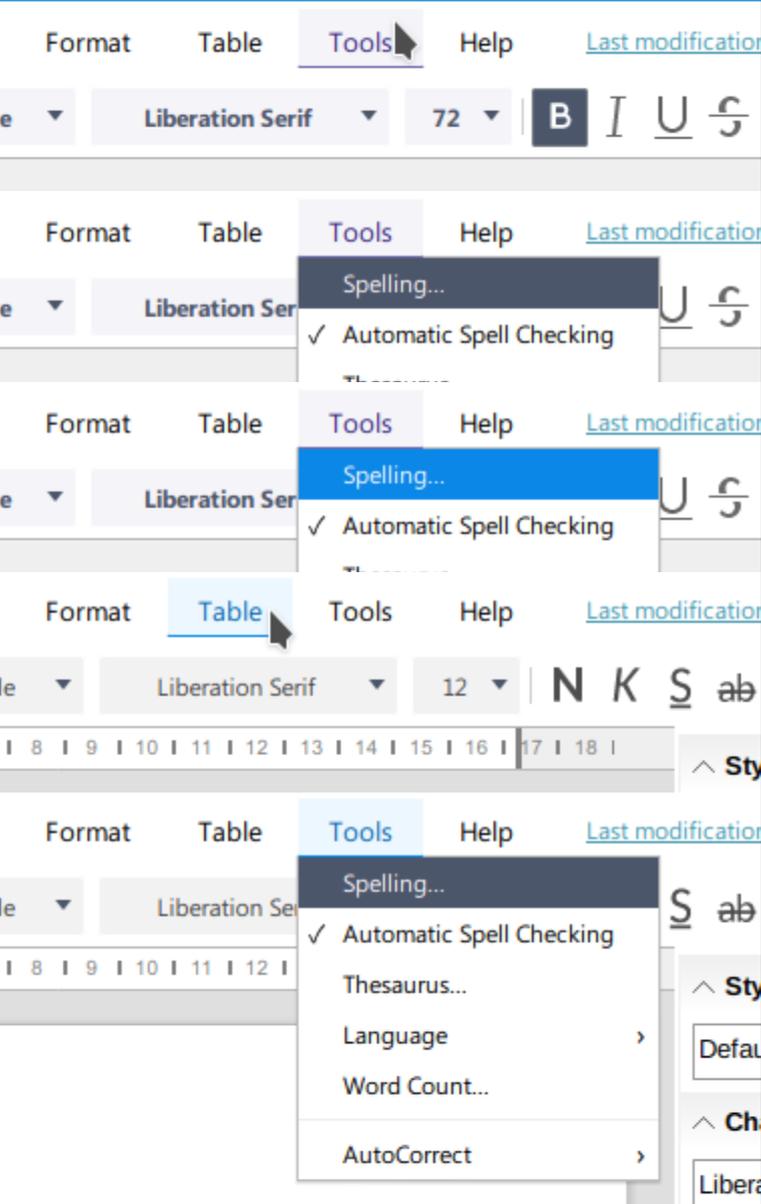
How to run

```
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.

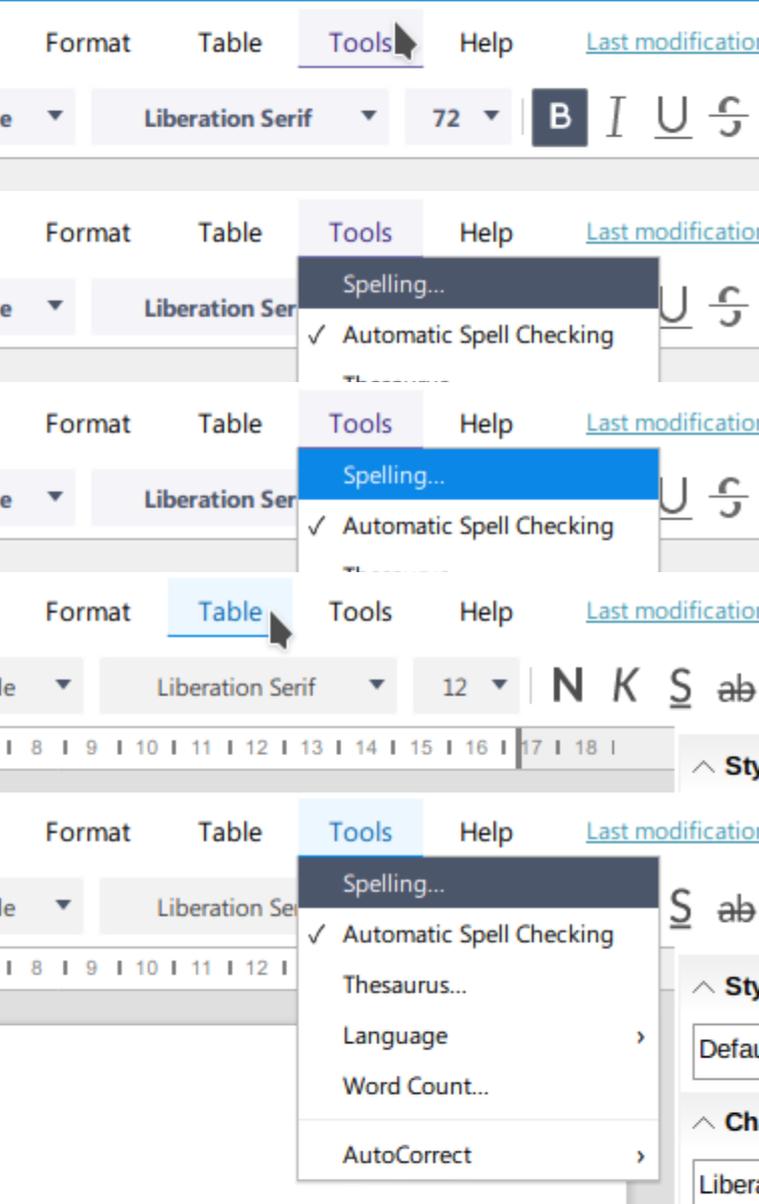


Example: toolbars



```
/*drop-down menu*/  
.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 .s  
  @include base.toolbar-up-dropdown-chevron(base.$theme)  
}  
  
.w2ui-toolbar table.w2ui-button{  
  border-radius: 2px;  
}
```

_toolbar-up.scss



```
/*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 [X]

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 [- +] Right: 1.0 pt [- +]

FORMAT CELLS [X]

Numbers Font Font Effects Alignment Asian Typography **Borders** Background Cell Protection

Line Arrangement Presets: [Icons]

Line Style: [Input] Width: [Input]

Padding Left: [-] 1.0 pt [+]

FORMAT CELLS [X]

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 [- +] Color: Blue [- +]

Padding Left: 1.0 pt [- +] Right: 1.0 pt [- +] Top: 1.0 pt [- +] Bottom: 1.0 pt [- +] Synchronize

Shadow Style Position: [Icons] Distance: 5 pt [- +] Color: Gray [- +]

Adjacent Cells: Remove border

The screenshot shows the Microsoft Word application window. The 'Format' menu is open, with 'Watermark...' selected. The 'Tools' menu is also open, with 'Spelling...' selected. The ribbon shows 'Default Style' and 'Liberation Se'. The text 'Hello world' is visible in the document area.

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...](#)

- Spelling...
- Automatic Spell Checking
- Thesaurus...
- Language >
- Word Count...
- AutoCorrect >

Tools Help [Last](#)

- Spelling...
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2 | 1 | 1 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 |

Hello world



Thank you!





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