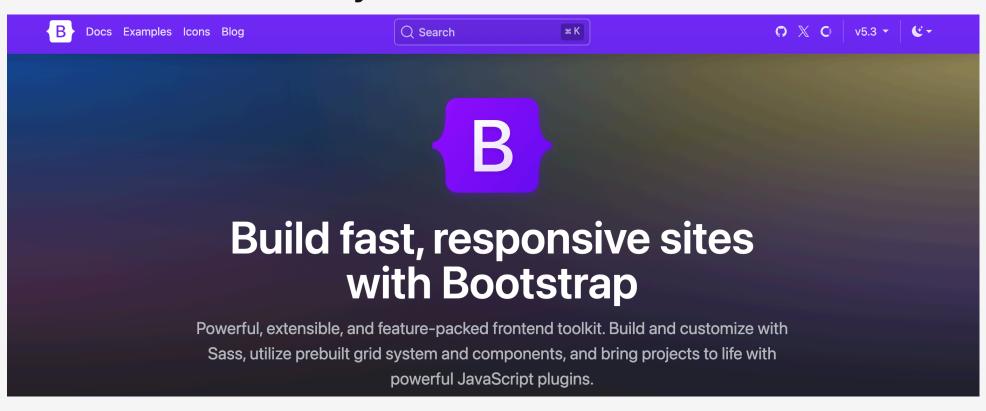
# Customization and branding



#### Bootstrap

Quarto uses the popular **Bootstrap** library for HTML structure and CSS styles.



#### **Bootstrap**

You can use **Bootstrap components and classes** for special styling

```
[Here's a button](thing.pdf){.btn .btn-primary role="button"}
[Here's another button](thing.pdf){.btn .btn-warning role="button"}
```

 $\downarrow$ 

Here's a button

Here's another button

#### **Bootswatch themes**

Quarto includes 25 themes from **Bootswatch**:

- default
- cerulean
- cosmo
- cyborg
- darkly
- flatly
- journal
- litera
- lumen

- lux
- materia
- minty
- morph
- pulse
- quartz
- sandstone
- simplex
- sketchy

- slate
- solar
- spacelab
- superhero
- united
- vapor
- yeti
- zephyr

# Changing themes

Specify the custom theme under theme in the YAML settings:

```
_quarto.yml

1 format:
2 html:
3 theme:
4 - zephyr
```

#### Your turn

- 1. Go to **bootswatch.com** and explore the different themes there (use the top navigation bar).
- 2. Preview your site, then try changing different Bootswatch themes in \_quarto.yml.



## Theme options

Sometimes we want to change theme settings though Many common basic options: https://quarto.org/docs/output-formats/html-themes.html#basic-options

#### **Total control with CSS**

#### Crash course in CSS

HTML elements can have IDs and classes

HTML elements can be nested inside each other

You can target HTML elements with different degrees of specificity:

- All <h3> headings
- H3 headings with the class neato
- <a> links that are inside a div with the id quartosidebar

## **Browser inpsector**

Explore and edit any HTML and CSS right from your browser.

### Sass: CSS, but fancier

variables rules that use variables

# **Combining CSS and themes**

asdf

#### Your turn

Create a SCSS file and make a bunch of rules



#### CSS is a little inconvenient

- Doesn't play well across HTML outputs HTML, slides, and dashboards all use slighlty different underlying HTML
- No easy way to reuse the colors and typography from your CSS customizations in R and Python plots or in PDF documents
- Hard to share consistent, resusable themes with others in your organization (or with the world)

# Style guides

Organizations and projects generally have style guides for consistency

**Urban Institute** 

This course! See the colophon



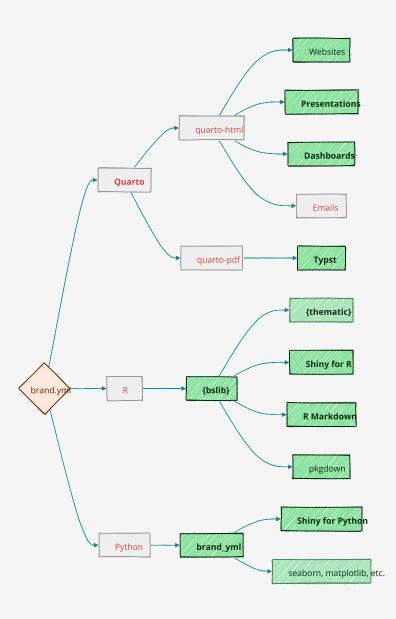
Unified branding with a simple YAML file

Create reports, apps, dashboards, plots and more that match your company's brand guidelines with a single \_brand.yml file.

# Branding can be frustrating But brand.yml makes it easier

- Define branding in a single \_brand.yml file.
- 2. Apply that branding across almost all Quarto formats.

brand.yml also works with Shiny!



# brand.yml elements

- meta: Identifying information, name of the company, URLs, etc.
- Logo: Files or links to the brand's logos.
- color: Colors in the brand's color palette.
- typography: Fonts for different elements.
- defaults: Additional context-specific settings.

#### brand.yml structure

```
_brand.yml
 1 meta:
     name: World Happiness Report
    link:
       home: https://www.worldhappiness.report/
   logo:
     images:
       icon:
         path: images/whr_logo.png
         alt: World Happiness Report icon.
10
11
     small: images/whr_logo.png
12
13 color:
14
     palette:
15
       dark-purple: "#93358c"
       light-purple: "#f8f6fb"
16
       teal: "#04afaf"
17
18
       dark-blue: "#086992"
```

#### How to apply brand.yml to Quarto

- 1. Define branding in \_brand.yml.
- 2. Save in the root directory of your Quarto project.

Quarto will detect the presence of \_brand.yml and automatically apply the brand to all documents of the supported formats in the project.

If your brand file has a different name or lives in a subdirectory, use the brand key.

```
my-document.qmd

1 ---
2 title: "World Happiness Report"
3 subtitle: "Happiness Trends and Contributing Factors (2011-2024)"
4 format: html
5 brand: org_theme.yml
6 ---
```

# Disable brand.yml

To turn off brand.yml for a document, use brand: false.

```
my-document.qmd

1 ---
2 title: "World Happiness Report"
3 subtitle: "Happiness Trends and Contributing Factors (2011-2024)"
4 format: html
5 brand: false
6 ---
```

#### brand shortcode

Access some brand.yml values with a shortcode.

```
my_document.qmd

1 {{< brand color primary >}}
```

#### Your turn

05:00

# What about plots?

# Theme helpers

The quarto packages contain theme helpers that apply branding to plots.

#### R Python

```
1 library(quarto)
2
3 my_theme <- theme_brand_ggplot2("_brand.yml")</pre>
```

R: https://quarto-dev.github.io/quarto-r/articles/theme-helpers.html
Python: https://github.com/quarto-dev/quarto-python?tab=readme-ov-file#theme-helpers

#### Your turn

05:00

# brand.yml packages

Access and apply specific brand elements.

R

#### **Python**

```
1 library(brand.yml)
2
3 brand <- read_brand_yml("_brand.yml")
4
5 brand$color$primary</pre>
```



# What's next?

#### Course outline

- V Intro to Quarto
- Creating basic websites
- Advanced website features
- Value
   Publishing
- Customization and branding
- Interactivity

