

# Quarto Clean Theme

*A Minimalistic Theme for Quarto + Typst + Touying*

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# **Section Slide as Header Level 1**

# Slide Title as Header Level 2

## *Subtitle as Header Level 3*

You can put any content here, including text, images, tables, code blocks, etc.

- ▶ first unordered list item

- A sub item

1. first ordered list item

- i. A sub item

Next, we'll brief review some theme-specific components.

- ▶ Note that *all* of the standard Quarto + Typst **features** can be used with this theme
- ▶ Also, all the **Touying** features can be used by **Typst native code**

# Before You Go...

The [clean theme](#) does not depend on any languages. You can use it with any language supported by Quarto, including R, Python, Julia.

For this demo, I use R code to show the figures and tables usage in the slides.

## Required Software (this demo only)

R Packages:

```
install.packages(c("palmerpenguins", "modelsummary", "tinytable", "dplyr",  
"ggplot2", "showtext"))
```

# Components

# Components

## *Ordered & Unordered Lists*

Here we have an unordered list.

- ▶ first item
  - sub-item
- ▶ second item

And next we have an ordered one.

1. first item
  - i. sub-item
2. second item

# Components

## *Alerts & Cross-refs*

Special classes for emphasis

- ▶ `.alert` class for default emphasis, e.g. `the second accent color`.
- ▶ `.fg` class for custom color, e.g. `with options='fill: rgb("#5D639E")'`.
- ▶ `.bg` class for custom background, e.g. `with the default color`.

To cross-reference, you have several options, for example:

- ▶ Beamer-like `.button` class provided by this theme, e.g. `▶ Appendix`
- ▶ Sections are not numbered in Touying, you cannot use `@sec-` cross-references

# Components

## *Citations*

Citations follow the standard [Quarto format](#) and be sourced from BibLaTeX, BibTeX, or CLS files. For example:

- ▶ **Topic 1:** Review of DID (Arkhangelsky and Imbens 2024)
- ▶ **Topic 2:** Goodman-Bacon (2021)

## *Small Citations*

In many cases, you may want to use small citations, like

- ▶ **Staggered DID** (Callaway and Sant'Anna 2021; Sun and Abraham 2021; Borusyak, Jaravel, and Spiess 2024)

This `.small-cite` class is defined as a custom style [▶ custom styling](#)



# Components

## *Blocks*

Quarto provides [dedicated environments](#) for theorems, lemmas, and so forth.

But in presentation format, it's arguably more effective just to use a [Callout Block](#).

### **i** Regression Specification

The main specification is as follows:

$$y_{it} = X_{it}\beta + \mu_i + \varepsilon_{it}$$

# Components

## *Multicolumn 1: Text only*

### Column 1

Here is a long sentence that will wrap onto the next line as it hits the column width, and continue this way until it stops.

Some text that should be laid out below the code

### Column 2

Some other text in another column.  
A second paragraph.

Quarto's layout is more simple and flexible than Touying's native multicolumn support.

# Components

## *Multicolumn II: Text and Figures*



- ▶ First point
- ▶ Second point

For simple cases, you don't even need to specify the class for each column.

# Ad-hoc Styling

## *Typst CSS*

- ▶ Quarto supports *Typst CSS* for simple styling
- ▶ You can change *colors*, *backgrounds*, and *opacity* for *span* elements

You can also change the font size and family for *div* elements.

## *Vertical Spacing*

- ▶ A helper shortcode `{{< v DIST >}}` is provided to add vertical spacing
- ▶ This is converted to a Typst code `#v(DIST)` internally.

This is a 2em vertical spaced from above.

# Custom Styling

As `latex-environment` quarto extension, you can define custom `div` and `span` elements.

```
format:
  clean-typst:
    include-in-header: "custom.typ"
    commands: [foo]
```

- ▶ You can define custom `div` and `span` elements as Typst functions in `custom.typ`
  - `environments` in YAML is for block elements `:::{.foo}\nbody\n:::`
  - `commands` in YAML is for inline elements `[] {.foo}`
- ▶ `[text]{.foo options="opts"}` is converted to `#foo(opts)[text]` internally
- ▶ If you want to use `self` as an argument, you can use `touying-fn-wrapper()`

# YAML Settings

## Fonts

```
format:
  clean-typst:
    font-size: 20pt
    font-heading: Josefin Sans
    font-body: Montserrat
    font-weight-heading: bold
    font-weight-body: normal
    font-size-title: 2.5em
    font-size-subtitle: 1.5em
```

- ▶ `font-size` is the default font size for the slide. Other font sizes are relative to this
- ▶ `font-heading` and `font-body` are the font families for headings and body text
- ▶ Since the title slide is important, size of the title `font-size-title` and `font-size-subtitle` can be set separately

# YAML Settings

## Colors

```
format:  
  clean-typst:  
    color-jet: "#272822"  
    color-accent: "$accent$"  
    color-accent2: "$accent2$"
```

- ▶ `color-jet` is the main color for text. `#000000` is too dark, and the default is `#131516`
- ▶ `color-accent` is used for the subtitle of the slide, buttons, lists, and the link colors
- ▶ `color-accent2` is used for the alert colors

# Animations



# Simple Animations

Touying's [simple animations](#) is available as `{{< pause >}}` and `{{< meanwhile >}}`

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Simple animations can be used in lists

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- ▶ Second

## Incremental Class (*experimental*)

As `revealjs`, you can use `.incremental` class

- ▶ First

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Simple animations can be used in lists

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## Incremental Class (*experimental*)

As `revealjs`, you can use `.incremental` class

- ▶ First
- ▶ Second

# Complex Animations

Touying's [complex animations](#) is available as `{.complex-anim repeat=4}` environment.

At subslide 1, we can

use `!space` for reserving space,

use `!nospace` for not reserving space,

call `#only` multiple times `x` for choosing one of the alternatives. But only works in a native Typst code.

# Complex Animations

Touying's [complex animations](#) is available as `{.complex-anim repeat=4}` environment.

At subslide 2, we can

use `{.uncover}` environment for reserving space,

use `{.only}` environment for not reserving space,

use `#alternatives` function ✓ for choosing one of the alternatives. But only works in a native Typst code.

# Complex Animations

Touying's [complex animations](#) is available as `{.complex-anim repeat=4}` environment.

At subslide 3, we can

use `{.uncover}` environment for reserving space,

use `{.only}` environment for not reserving space,

use `#alternatives` function ✓ for choosing one of the alternatives. But only works in a native Typst code.

# Complex Animations

Touying's [complex animations](#) is available as `{.complex-anim repeat=4}` environment.

At subslide 4, we can

use `{.uncover}` environment for reserving space,

use `{.only}` environment for not reserving space,

use `#alternatives` function ✓ for choosing one of the alternatives. But only works in a native Typst code.

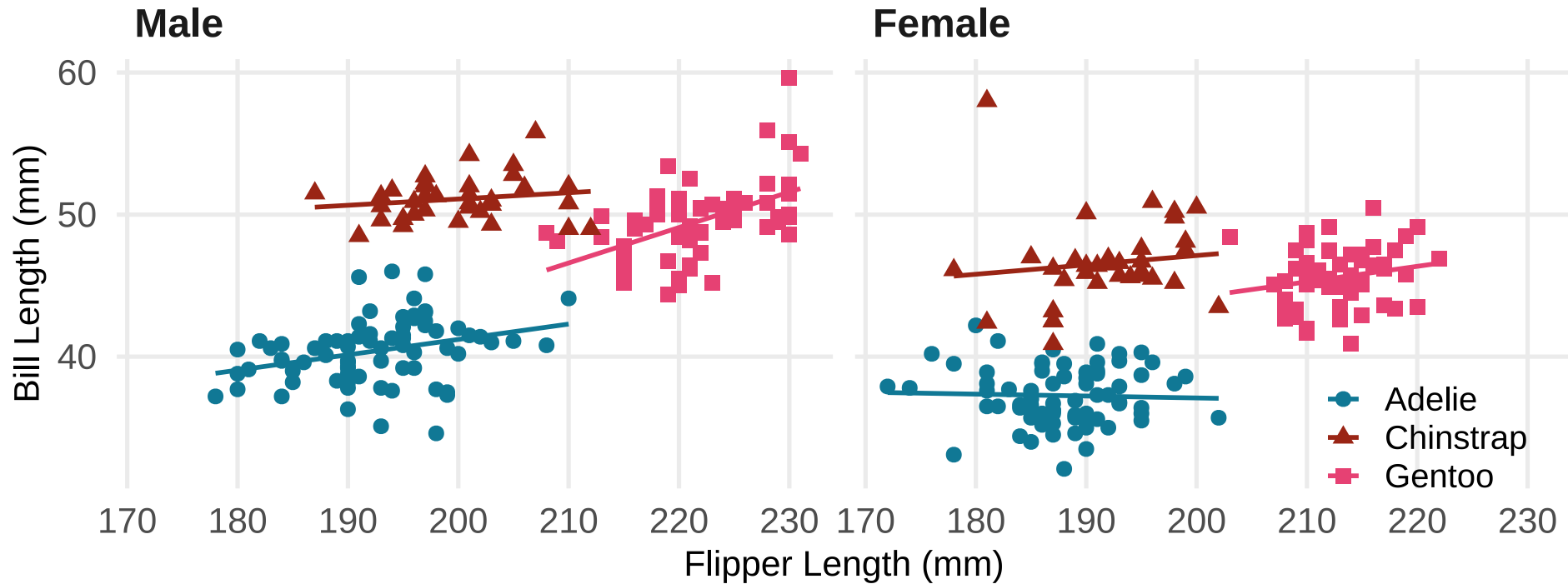
## *Other Features*

- ▶ All the animation functions can be used in Typst Math code [▶ Appendix](#)
- ▶ `handout: true` in YAML header is available for handout mode (without animations)



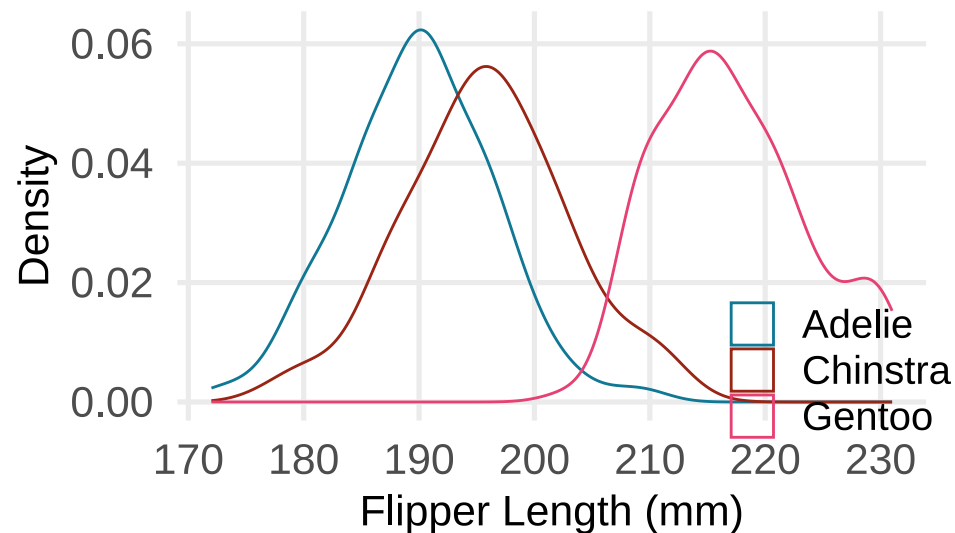
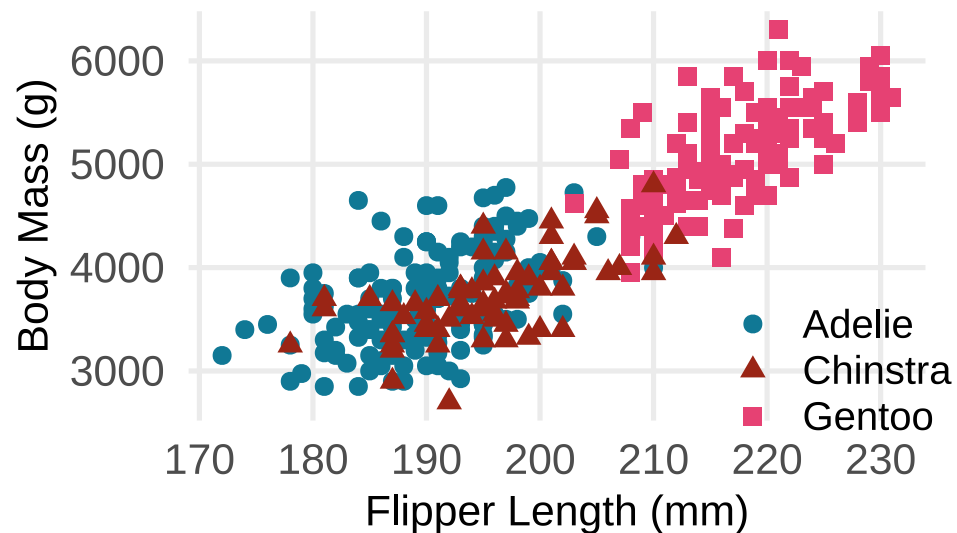
# Figures & Tables

# Figures



This is a `facet_wrap` example with `penguins` dataset.

# Figures



This is an example of `layout-ncol: 2` for two figures.

# Tables

	Male				Female			
	Bill	Bill	Flipper	Body	Bill	Bill	Flipper	Body
	Length	Depth	Length	Mass	Length	Depth	Length	Mass
	(mm)	(mm)	(mm)	(g)	(mm)	(mm)	(mm)	(g)
Adelie	40.39	19.07	192.4	4043	37.26	17.62	187.8	3369
Gentoo	49.47	15.72	221.5	5485	45.56	14.24	212.7	4680
Chinstrap	51.09	19.25	199.9	3939	46.57	17.59	191.7	3527

- ▶ You can easily create Typst tables by [tinytable](#)

# Tables

	Male				Female			
	Bill	Bill	Flipper	Body	Bill	Bill	Flipper	Body
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- ▶ You can **highlight** by `tinytable::style_tt()`!

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- ▶ You can easily create Typst tables by `tinytable`
- ▶ You can **highlight** by `tinytable::style_tt()`!
- ▶ Read the [GitHub Issue](#) and see `theme_slides()` for the table without captions

# Regression Table

	Bill Length (mm)			Body Mass (g)		
	(1)	(2)	(3)	(4)	(5)	(6)
Chinstrap	10.042** (0.432)	10.010** (0.341)	10.037** (0.340)	32.426 (67.512)	26.924 (46.483)	27.229 (46.587)
Gentoo	8.713** (0.360)	8.698** (0.287)	8.693** (0.286)	1375.354** (56.148)	1377.858** (39.104)	1377.813** (39.163)
Male		3.694** (0.255)	3.694** (0.254)		667.555** (34.704)	667.560** (34.755)
Year			0.324* (0.156)			3.629 (21.428)
Observations	342	333	333	342	333	333

+ p < 0.1, \* p < 0.05, \*\* p < 0.01

`modelsummary` is a super useful for regression tables (`tinytable` is used internally)

# Last Words

## *Installation*

```
quarto install extension kazuyanagimoto/quarto-clean-typst
```

## *Limitations*

- ▶ Background colors and images are not supported

## *Appendix*

- ▶ You can use `{{< appendix >}}` to start an appendix section. Slide numbering will be freezed. (Next Slides)



# Appendix

# Touying Math Animations

Touying equation with pause:

\$

```
f(x) &= pause x^2 + 2x + 1 \
      &= pause (x + 1)^2 \
```

\$

Touying equation is very simple.

Touying equation with pause:

$$f(x) =$$

Touying equation is very simple.

► [Back to main](#)

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Touying equation with pause:

$$f(x) = x^2 + 2x + 1$$
$$=$$

Touying equation is very simple.

► Back to main

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f(x) &= pause x^2 + 2x + 1 \
      &= pause (x + 1)^2 \
```

\$

Touying equation is very simple.

Touying equation with pause:

$$\begin{aligned} f(x) &= x^2 + 2x + 1 \\ &= (x + 1)^2 \end{aligned}$$

Touying equation is very simple.

► Back to main

# References

- Arkhangelsky, Dmitry, and Guido Imbens. 2024. “Causal Models for Longitudinal and Panel Data: A Survey”. June 25, 2024. <https://doi.org/10.48550/arXiv.2311.15458>
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- Callaway, Brantly, and Pedro H.C. Sant'Anna. 2021. “Difference-in-Differences with Multiple Time Periods”. *Journal of Econometrics* 225 (2): 200–230. <https://doi.org/10.1016/j.jeconom.2020.12.001>
- Goodman-Bacon, Andrew. 2021. “Difference-in-Differences with Variation in Treatment Timing”. *Journal of Econometrics*, Themed Issue: Treatment Effect 1, 225 (2): 254–77. <https://doi.org/10.1016/j.jeconom.2021.03.014>

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Sun, Liyang, and Sarah Abraham. 2021. “Estimating Dynamic Treatment Effects in Event Studies with Heterogeneous Treatment Effects”. *Journal of Econometrics* 225 (2): 175–99. <https://doi.org/10.1016/j.jeconom.2020.09.006>