

Quarto Presentations with Reveal.js

Hello, There

Reveal.js enables you to create beautiful interactive slide decks using HTML. This presentation will show you examples of what it can do, including:

- Presenting code and LaTeX equations
- Including computations in slide output
- Image, video, and iframe backgrounds
- Fancy transitions and animations
- Printing to PDF

Pretty Code

- Over 20 syntax highlighting themes available
- Default theme optimized for accessibility

```
1 # Define a server for the Shiny app
2 function(input, output) {
3
4   # Fill in the spot we created for a plot
5   output$phonePlot <- renderPlot{
6     # Render a barplot
7   })
8 }
```

Code Animations

- Over 20 syntax highlighting themes available
- Default theme optimized for accessibility

```
1 # Define a server for the Shiny app
2 function(input, output) {
3
4   # Fill in the spot we created for a plot
5   output$phonePlot <- renderPlot{
6     # Render a barplot
7     barplot(WorldPhones[,input$region]*1000,
8               main=input$region,
9               ylab="Number of Telephones",
10              xlab="Year")
11   }
12 }
```

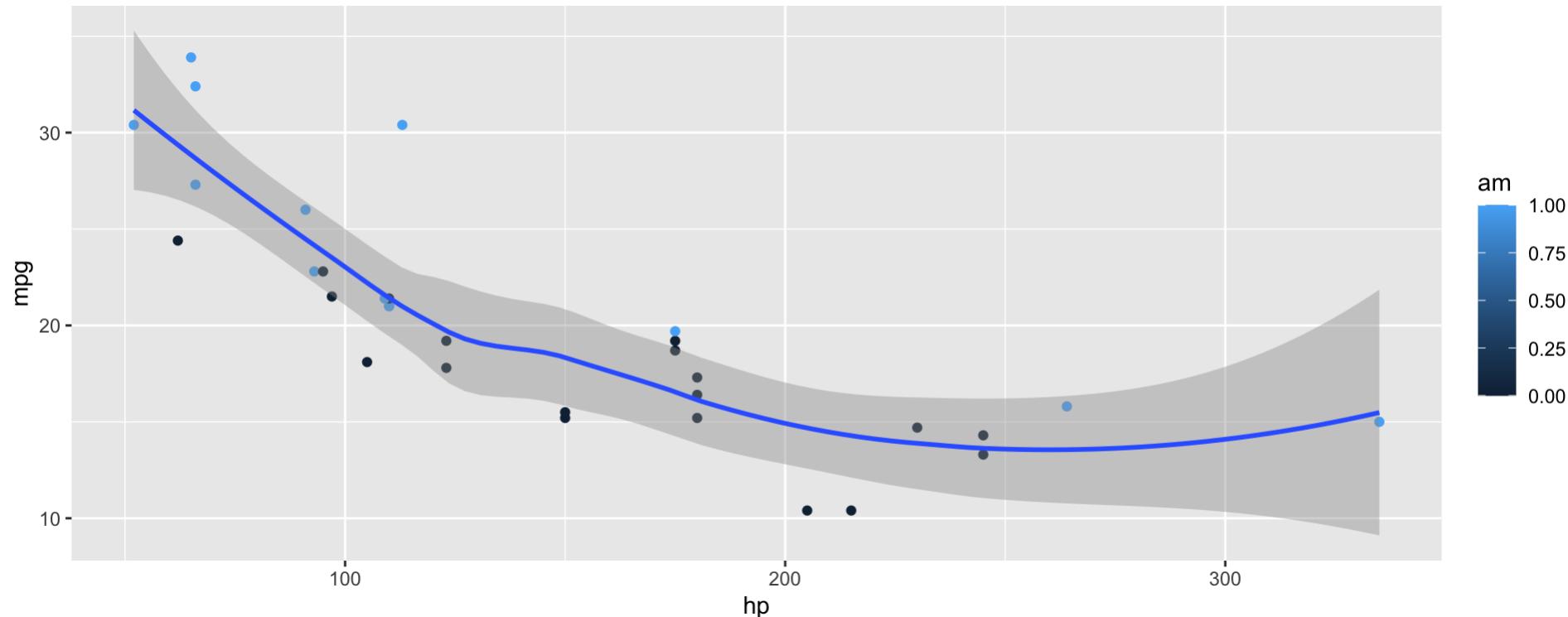
Line Highlighting

- Highlight specific lines for emphasis
- Incrementally highlight additional lines

```
1 import numpy as np
2 import matplotlib.pyplot as plt
3
4 r = np.arange(0, 2, 0.01)
5 theta = 2 * np.pi * r
6 fig, ax = plt.subplots(subplot_kw={'projection': 'polar'})
7 ax.plot(theta, r)
8 ax.set_rticks([0.5, 1, 1.5, 2])
9 ax.grid(True)
10 plt.show()
```

Executable Code

```
1 library(ggplot2)
2 ggplot(mtcars, aes(hp, mpg, color = am)) +
3   geom_point() + geom_smooth(formula = y ~ x, method = "loess")
```



LaTeX Equations

MathJax rendering of equations to HTML

```
1 \begin{gather*}
2 a_1=b_1+c_1\\
3 a_2=b_2+c_2-d_2+e_2
4 \end{gather*}
5
6 \begin{align}
7 a_{11}&=b_{11}&
8 a_{12}&=b_{12}\\
9 a_{21}&=b_{21}&
10 a_{22}&=b_{22}+c_{22}
11 \end{align}
```

$$a_1 = b_1 + c_1$$

$$a_2 = b_2 + c_2 - d_2 + e_2$$

$$a_{11} = b_{11}$$

$$a_{12} = b_{12}$$

$$a_{21} = b_{21}$$

$$a_{22} = b_{22} + c_{22}$$

Column Layout

Arrange content into columns of varying widths:

Motor Trend Car Road Tests

The data was extracted from the 1974 Motor Trend US magazine, and comprises fuel consumption and 10 aspects of automobile design and performance for 32 automobiles.

	mpg	cyl	disp	hp	wt
Mazda RX4	21.0	6	160	110	2.620
Mazda RX4 Wag	21.0	6	160	110	2.875
Datsun 710	22.8	4	108	93	2.320
Hornet 4 Drive	21.4	6	258	110	3.215
Hornet Sportabout	18.7	8	360	175	3.440
Valiant	18.1	6	225	105	3.460

Incremental Lists

Lists can optionally be displayed incrementally:

- First item
- Second item
- Third item

Insert pauses to make other types of content display incrementally.

Fragments

Incremental text display and animation with fragments:

Fade in

Slide up while fading in

Slide left while fading in

Fade in then semi out

~~Strike~~

Highlight red

Slide Backgrounds

Set the `background` attribute on a slide to change the background color (all CSS color formats are supported).

Different background transitions are available via the `background-transition` option.

Media Backgrounds

You can also use the following as a slide background:

- An image: `background-image`
- A video: `background-video`
- An iframe: `background-iframe`

Position Elements Anywhere



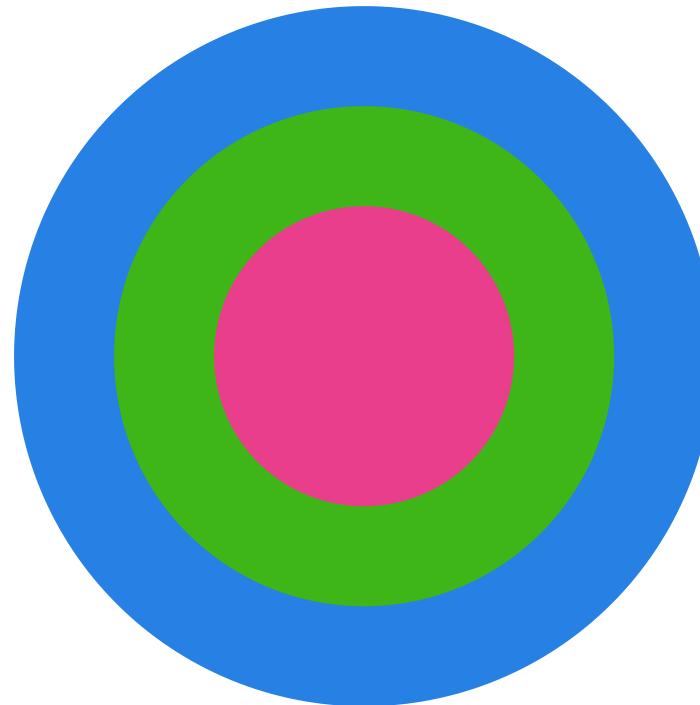
Auto-Animate

Automatically animate matching elements across slides with Auto-Animate.



Auto-Animate

Automatically animate matching elements across slides with Auto-Animate.



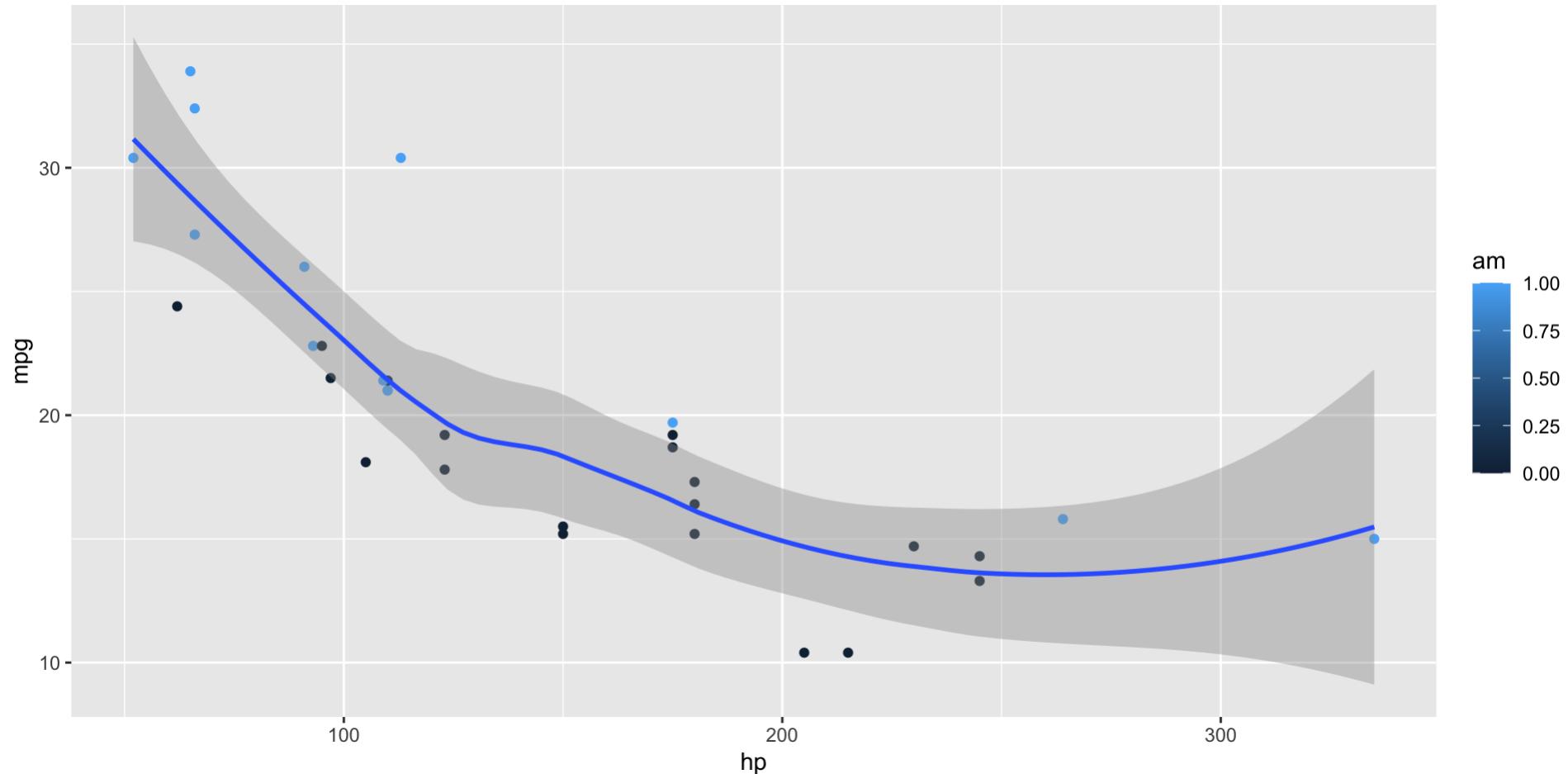
Slide Transitions

The next few slides will transition using the `slide` transition

Transition	Description
<code>none</code>	No transition (default, switch instantly)
<code>fade</code>	Cross fade
<code>slide</code>	Slide horizontally
<code>convex</code>	Slide at a convex angle
<code>concave</code>	Slide at a concave angle
<code>zoom</code>	Scale the incoming slide so it grows in from the center of the screen.

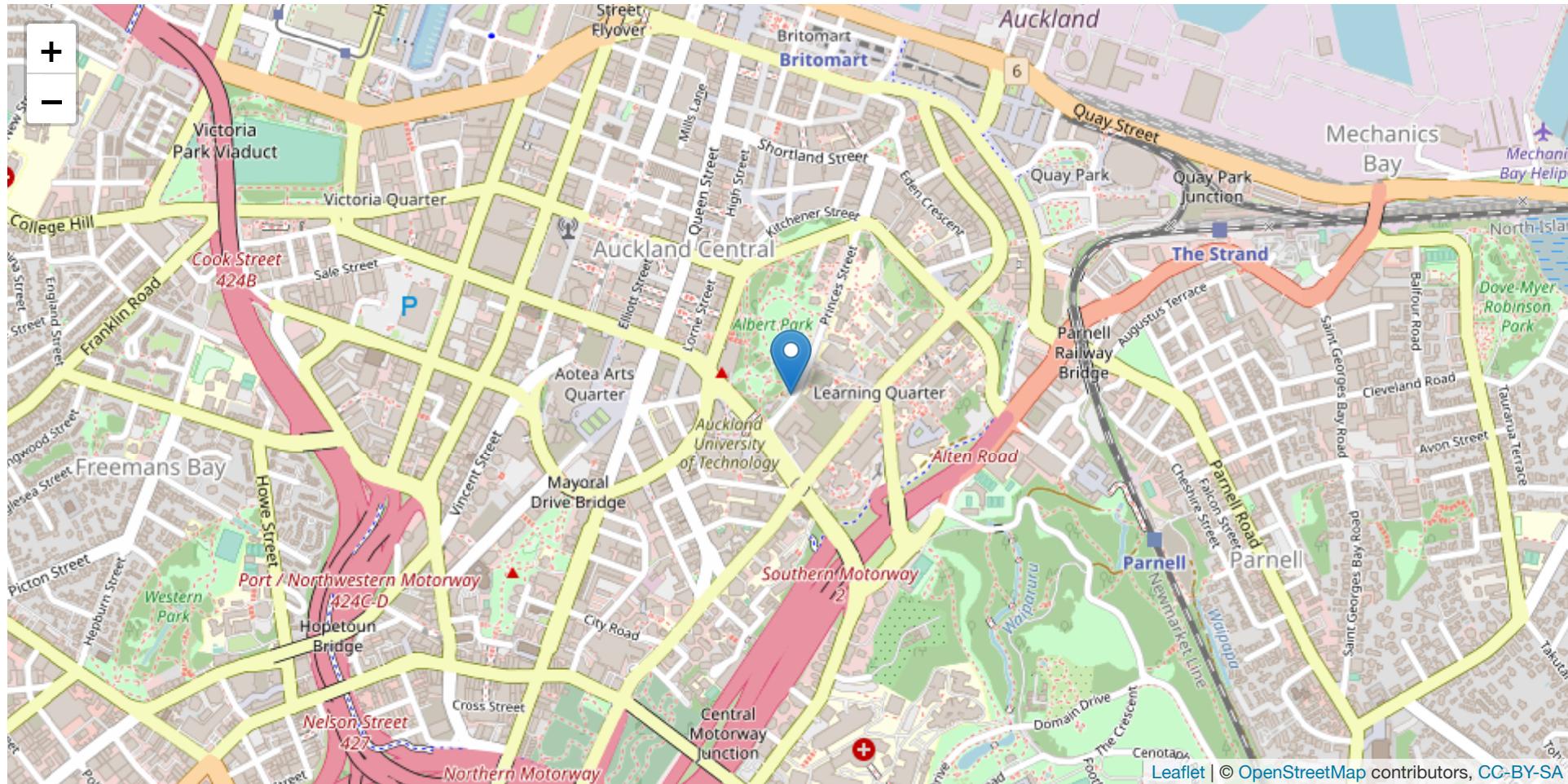
Tabs

Plot Data



Interactive Presentations

Interactive plots with Jupyter widgets and htmlwidgets



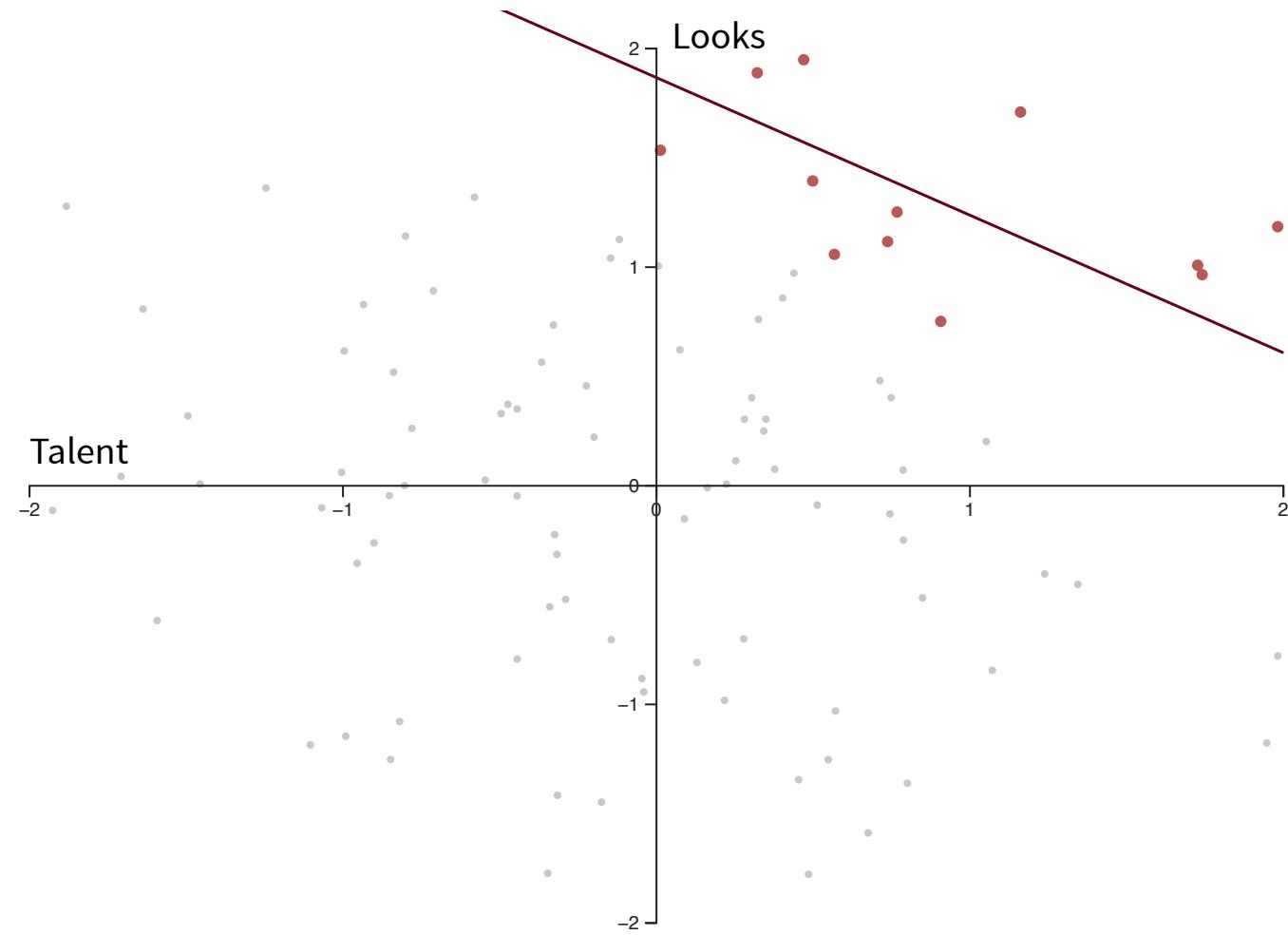
Interactive Presentations

Embedded applications with Observable and Shiny

talent weight
0.7

looks weight
0.7

min fame
1



Preview Links

Navigate to hyperlinks without disrupting the flow of your presentation.

Use the `preview-links` option to open links in an iframe on top of your slides. Try clicking the link below for a demonstration:

[Matplotlib: Visualization with Python](https://quarto.org)

Themes

10 Built-in Themes (or [create your own](#))

9 / 16

INCREMENTAL LISTS

Lists can optionally be displayed incrementally:

- First item
- Second item
- Third item

< >

Insert pauses to make other types of content display incrementally.

☰ Learn more: Incremental Lists quarto®

9 / 16

INCREMENTAL LISTS

Lists can optionally be displayed incrementally:

- First item
- Second item
- Third item

< >

Insert pauses to make other types of content display incrementally.

☰ Learn more: Incremental Lists quarto®

Easy Navigation

Quickly jump to other parts of your presentation

- ☰ Toggle the slide menu with the menu button (bottom left of slide) to go to other slides and access presentation tools.

You can also press **m** to toggle the menu open and closed.

Chalkboard

Free form drawing and slide annotations

-  Use the chalkboard button at the bottom left of the slide to toggle the chalkboard.
-  Use the notes canvas button at the bottom left of the slide to toggle drawing on top of the current slide.

You can also press **b** to toggle the chalkboard or **c** to toggle the notes canvas.

Point of View

Press **O** to toggle overview mode:

Cross References



Figure 1: Persian Elephants

See Fig. 1 for examples. In particular, Fig. 1(a).

Cross references: figures, tables, equations, sections, theorems, etc.

Path: <https://quarto.org/docs/crafting-cross-references.html#callfigures>

Quarto Jupyter: <https://quarto.org/docs/authors/cross-references.html#callfunctions>

Advanced page layout

Advanced page layout features inspired by Tufte, Distill, and Hugo Prose.

- Figures and tables that span the entire page
- Use of margin for figures, equations, captions, asides, footnotes, and citations
- Responsive show/hide of site navigation and TOC
- Examples: [HTML](#), [PDF](#)

Figure/layout Panels



- Arbitrary layout of figures and tables (similar to [Tufte](#) and [Distill](#))
- also works for code chunks that render figures and tables: <https://quarto.org/docs/authors/layouts-figures-against.html#figures>
- Shorter dynamic layouts—useful for layout reuse, available for single rows.
- Can target arbitrary content including equations, bullet lists, etc.

Callouts

Work in HTML, PDF, MS Word, and LaTeX output



Callouts are annotations that highlight certain text, images, or sections of a document.

1. **Caption**: Annotations can be applied to figures, tables, equations, and sections.

2. **Figure 1: Persian Elephants**: Annotations can be applied to figures and tables.

3. **Margin**: Annotations can be applied to margins.

4. **Figure 1: Persian Elephants**: Annotations can be applied to figures and tables.

Quarto Websites

- Arbitrary content depth / organization
- Multi-level navigation (navbar / sidebar / hybrid)
- Full text search (client side or Algolia)
- Freezing computational output
- Example: <https://quarto.org>

Hold down the **Alt** key (or **Ctrl** in Linux) and click on any element to zoom towards it—try it now on this slide.

<https://quarto.org>

 quarto®

Speaker View

Press **s** (or use the presentation menu) to open speaker view

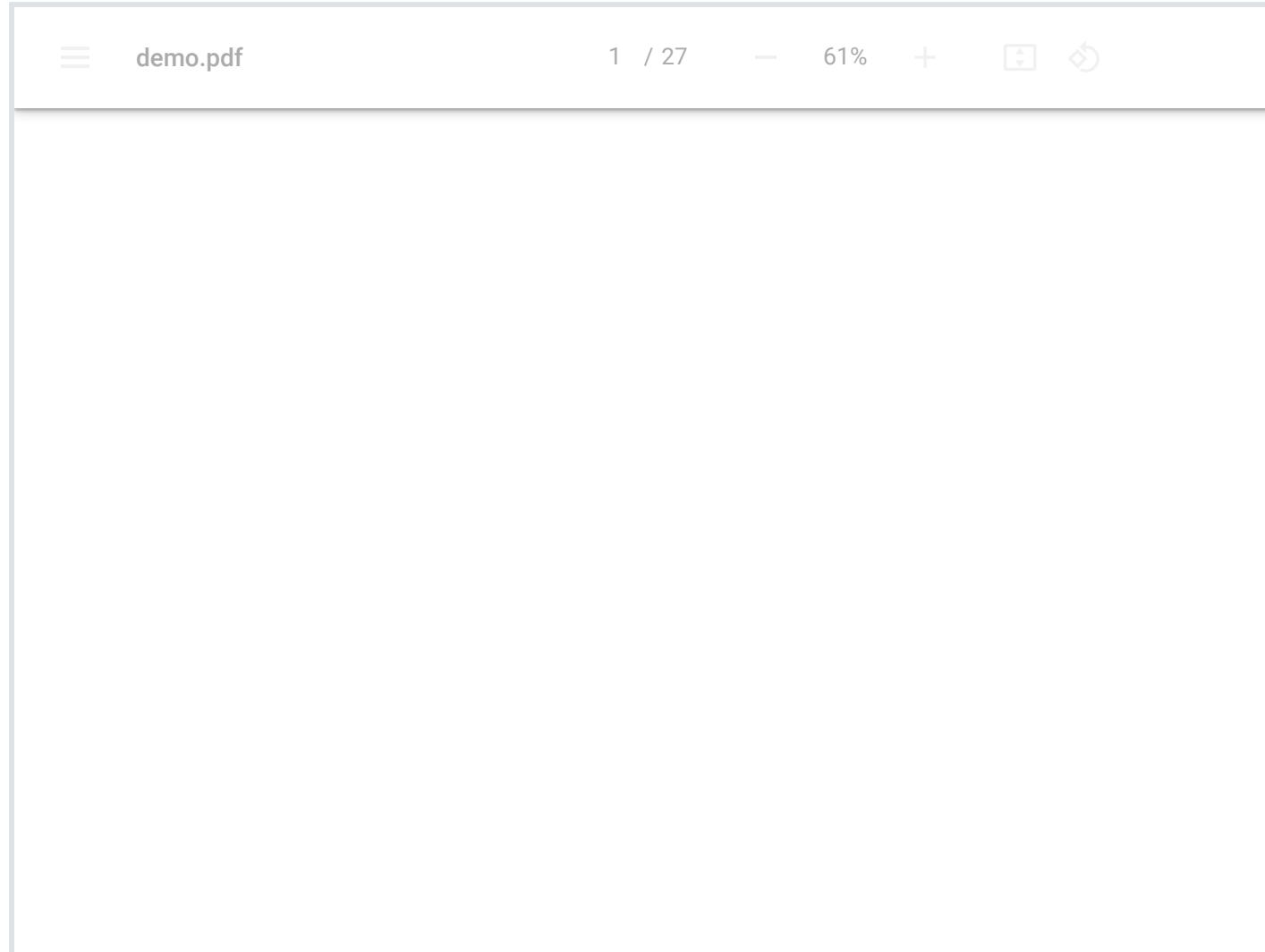
The image shows a speaker view interface for a presentation. On the left, a large slide area displays the title "Quarto Presentations with Reveal.js". Below the title is a URL "https://quarto.org" and the Quarto logo. At the top right of the slide area, it says "1 / 23". To the right of the slide area is a sidebar with the following content:

- Upcoming, There**
- Layout: Default**
- Reveal.js enables you to create beautiful interactive slide decks using HTML. This presentation will show you examples of what it can do, including:
 - Presenting code and LaTeX equations
 - Including computations in slide output
 - Image, video, and iframe backgrounds
 - Fancy transitions and animations
 - Printing to PDF
- Learn more: [Quarto Presentations](#)

At the bottom of the sidebar, there is a Quarto logo. On the far right, there is a timestamp: "TIME 00:01:01 09:33 AM".

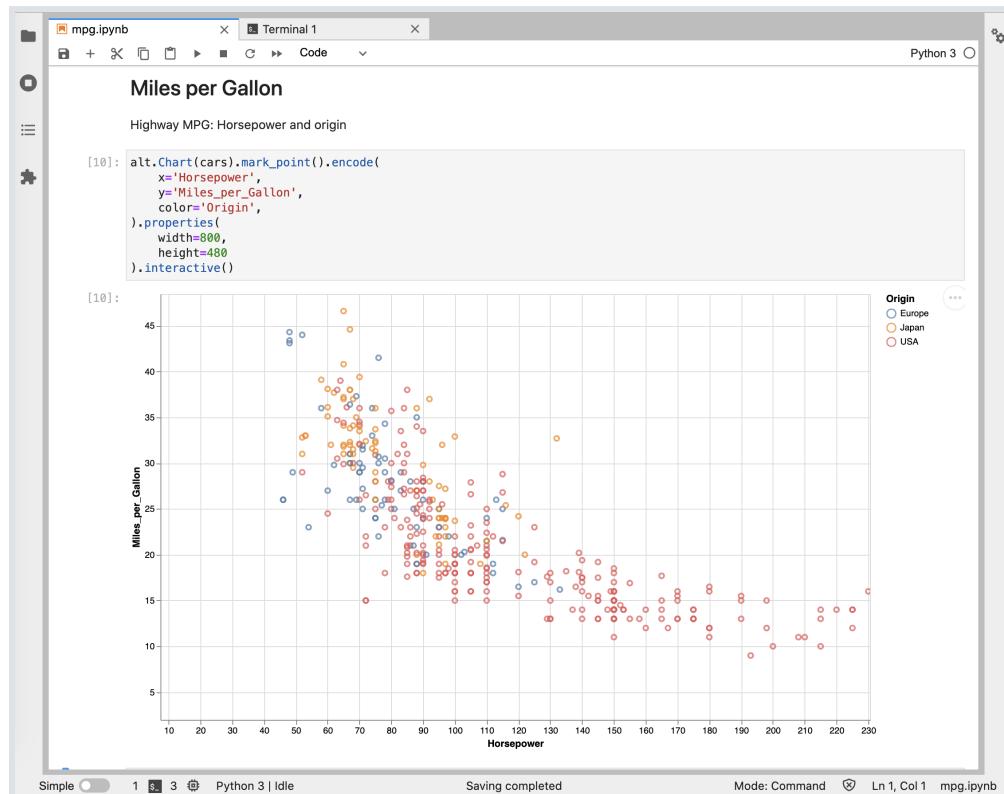
Print to PDF

Print presentations to PDF using Chrome. Here's a PDF version of this demo presentation:



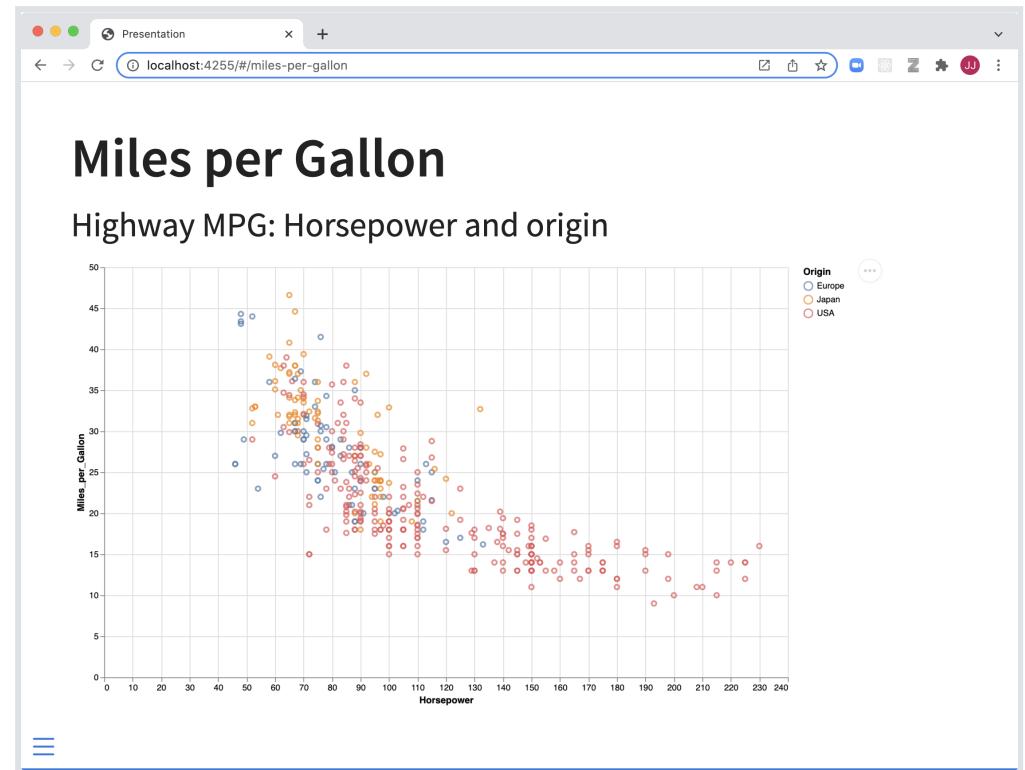
Author in a Notebook or Text Editor

Live side-by-side preview for Jupyter, VS Code, etc.



The screenshot shows a Jupyter Notebook interface with a code cell containing Python code to generate a scatter plot. The plot, titled "Miles per Gallon", displays the relationship between "Horsepower" (x-axis, ranging from 10 to 230) and "Miles_per_Gallon" (y-axis, ranging from 5 to 45). Data points are colored by origin: Europe (blue), Japan (orange), and USA (red). The plot is interactive, as indicated by the ".interactive()" call at the end of the code.

```
[10]: alt.Chart(cars).mark_point().encode(
  x='Horsepower',
  y='Miles_per_Gallon',
  color='Origin',
).properties(
  width=800,
  height=480
).interactive()
```



Author in RStudio

Integrated presentation preview pane

The screenshot shows the RStudio interface with an integrated presentation preview pane. The top navigation bar includes 'File', 'Edit', 'View', 'Tools', 'Help', 'Addins', 'Project: (None)', 'Environment', 'History', 'Connections', 'Tutorial', 'Presentation', 'Print', 'Edit', 'Publish', and 'Miles Per Gallon (2/2)'. The main area displays a presentation slide titled 'Miles Per Gallon' with the subtitle 'Highway MPG: Displacement and vehicle class'. The slide contains a ggplot2 scatter plot of highway mpg (hwy) versus displacement (displ). The plot uses color to represent vehicle classes: 2seater (red), compact (orange), midsize (green), minivan (teal), pickup (blue), subcompact (purple), and suv (pink). The plot shows a general downward trend where higher displacement tends to correspond with lower mpg. The legend is titled 'class' and lists the seven vehicle types. Below the plot, the R code used to generate it is shown:

```
{r}
library(ggplot2)
ggplot(data = mpg) +
  geom_point(mapping = aes(x = displ, y = hwy, color = class))
```

The bottom section of the interface shows the 'Console' tab.

And More...

- **Touch** optimized (presentations look great on mobile, swipe to navigate slides)
- **Footer & Logo** (optionally specify custom footer per-slide)
- **Auto-Slide** (step through slides automatically, without any user input)
- **Multiplex** (allows your audience to follow the slides of the presentation you are controlling on their own phone, tablet or laptop).