



Herzlichen Glückwunsch! Sie haben bestanden!

ZUM BESTEHEN 80 % oder höher

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BEWERTUNG
80 %

Weekly challenge 4

NEUESTE EINREICHUNGSBEWERTUNG

80%

1. Which of the following are benefits of using ggplot2? Select all that apply.

0.5 / 1 Punkt

- ☐ Easily add layers to your plot
- ☒ Combine data manipulation and visualization



Richtig

The benefits of using ggplot2 include easily adding layers to your plot, customizing the look and feel of your plot, combining data manipulation and visualization.

- ☒ Customize the look and feel of your plot



Richtig

The benefits of using ggplot2 include easily adding layers to your plot, customizing the look and feel of your plot, combining data manipulation and visualization.

- ☒ Automatically clean data before creating a plot



Diese Antwort sollte nicht ausgewählt werden

Review the section introducing ggplot2 for a refresher.

2. Fill in the blank: In ggplot2, you use the ____ to add layers to your plot.

1 / 1 Punkt

- ☐ pipe operator (%>%)
- ☐ equal sign (=)
- ☒ plus sign (+)
- ☐ ampersand symbol (&)



Richtig

In ggplot2, you use the plus sign (+) to add layers to your plot.

3. A data analyst creates a plot using the following code chunk:

1 / 1 Punkt

```
ggplot(data = penguins) +  
  geom_point(mapping = aes(x = flipper_length_mm, y = body_mass_g))
```

Which of the following represents a function in the code chunk? Select all that apply.

- ☒ The geom_point function



Richtig

The functions in the code chunk are the ggplot() function, the geom_point() function, and the aes() function. The ggplot() function specifies the data frame to use for the plot. The geom_point() function specifies the geometric object that represents the data. The aes() function specifies the aesthetic attributes of the plot.

- ☒ The ggplot function



Richtig

The functions in the code chunk are the ggplot() function, the geom_point() function, and the aes() function. The ggplot() function specifies the data frame to use for the plot. The geom_point() function specifies the geometric object that represents the data. The aes() function specifies the aesthetic attributes of the plot.

- ☐ the data function

- ☒ The aes function



Richtig

The functions in the code chunk are the ggplot() function, the geom_point() function, and the aes() function. The ggplot() function specifies the data frame to use for the plot. The geom_point() function specifies the geometric object that represents the data. The aes() function specifies the aesthetic attributes of the plot.

4. Fill in the blank: In ggplot2, the term mapping refers to the connection between variables and ____.

1 / 1 Punkt

- ☐ geoms
- ☒ aesthetics
- ☐ facets
- ☐ data frames



Richtig

Mapping means matching up a specific variable in your data set with a specific aesthetic. You use the aes() function to define the mapping between your data and your plot.

5. A data analyst creates a scatterplot with a lot of data points. The analyst wants to make some points on the plot more transparent than others. What aesthetic should the analyst use?

1 / 1 Punkt

- ☒ Alpha
- ☐ Color
- ☐ Shape
- ☐ Fill

✓ **Richtig**

The analyst should use the alpha aesthetic. The alpha aesthetic makes some points on a plot more transparent than others.

6. You are working with the penguins dataset. You create a scatterplot with the following code chunk:

0 / 1 Punkt

```
ggplot(data = penguins) +  
  
  geom_point(mapping = aes(x = flipper_length_mm, y = body_mass_g))
```

How do you change the second line of code to map the aesthetic *size* to the variable *species*?

- ☒ `geom_point(mapping = aes(x = flipper_length_mm, y = body_mass_g, species = size))`
- ☐ `geom_point(mapping = aes(x = flipper_length_mm, y = body_mass_g, size = species))`
- ☐ `geom_point(mapping = aes(x = flipper_length_mm, y = body_mass_g, size + species))`
- ☐ `geom_point(mapping = aes(x = flipper_length_mm, y = body_mass_g, species + size))`

✗ **Falsch**

Review the section on aesthetics for a refresher.

7. A data analyst creates a plot with the following code chunk:

1 / 1 Punkt

```
ggplot(data = penguins) +  
  geom_jitter(mapping = aes(x = flipper_length_mm, y = body_mass_g))
```

What does the `geom_jitter()` function do to the points in the plot?

- ☐ Adds random colors to each point in the plot
- ☐ Adds a small amount of random shapes at each point in the plot
- ☐ Decrease the size of each point in the plot
- ☒ Adds a small amount of random noise to each point in the plot

✓ **Richtig**

The `geom_jitter()` function creates a scatterplot and then adds a small amount of random noise to each point in the plot to make the points easier to find.

8. You have created a plot based on data in the diamonds dataset. What code chunk can be added to your existing plot to create wrap around facets based on the variable *clarity*?

1 / 1 Punkt

- ☐ `facet_wrap(~clarity)`
- ☐ `facet_wrap(+clarity)`
- ☐ `facet(clarity)`
- ☒ `facet_wrap(~clarity)`

✓ **Richtig**

The code chunk is `facet_wrap(~clarity)`. Inside the parentheses of the `facet_wrap()` function, type a tilde symbol (~) followed by the name of the variable you want to facet.

9. A data analyst uses the `annotate()` function to create a text label for a plot. Which attributes of the text can the analyst change by adding code to the argument of the `annotate()` function? Select all that apply.

0.5 / 1 Punkt

- ☐ Change the size of the text
- ☒ Change the font style of the text

✓ **Richtig**

By adding code to the argument of the `annotate()` function, the analyst can change the font style, color, and size of the text.

- ☒ Change the text into a title for the plot

✗

Diese Antwort sollte nicht ausgewählt werden

Review the section on labels and annotations for a refresher.

- ☒ Change the color of the text

✓ **Richtig**

By adding code to the argument of the `annotate()` function, the analyst can change the font style, color, and size of the text.

10. You are working with the penguins dataset. You create a scatterplot with the following lines of code:

1 / 1 Punkt

```
ggplot(data = penguins) +  
  
  geom_point(mapping = aes(x = flipper_length_mm, y = body_mass_g)) +
```

What code chunk do you add to the third line to save your plot as a jpeg file with "penguins" as the file name?

- ☒ `ggsave("penguins.jpeg")`
- ☐ `ggsave(penguins.jpeg)`
- ☐ `ggsave(penguins, "penguins.jpeg")`

☐ `ggsave(penguins)`

☐ `ggsave("jpeg.penguins")`

✓ Richtig

You add the code chunk `ggsave("penguins.jpeg")` to save your plot as a jpeg file with "penguins" as the file name. Inside the parentheses of the `ggsave()` function, type a quotation mark followed by the file name (penguins), then a period, then the type of file (jpeg), then a closing quotation mark.