

Day 7 Cheatsheet

Data Visualization

Major concepts:

- ggplot2 A tidyverse package for producing graphics
- Tidy data: Each variable forms a column and each observation forms a row.

Functions

| Library/Package | Piece of code | Example of usage | What it does |
|-----------------|------------------------------|--------------------|--|
| ggplot2 | <code>ggplot()</code> | GG Plot | Begins a plot that is finished by adding layers. |
| ggplot2 | <code>aes()</code> | Aesthetic Mappings | Designates how variables in the data object are mapped to the visual properties of the ggplot. |
| ggplot2 | <code>geom_boxplot()</code> | Boxplot | Creates a boxplot when added as a layer to a <code>ggplot()</code> object. |
| ggplot2 | <code>geom_density()</code> | Density Plot | Creates a smoothed plot when added as a layer to a <code>ggplot()</code> object based on the computed density estimate. |
| ggplot2 | <code>geom_point()</code> | Scatterplot | Creates a scatterplot when added as a layer to a <code>ggplot()</code> object. |
| ggplot2 | <code>geom_line()</code> | Line plot | Creates a line plot when added as a layer to a <code>ggplot()</code> object by connecting the points in order of the x axis variable. |
| ggplot2 | <code>geom_hline()</code> | Horizontal line | Annotates a plot with horizontal lines when added as a layer to a <code>ggplot()</code> object with one of the <code>geom</code> functions used to draw the plot, for example, <code>geom_point()</code> . |
| ggplot2 | <code>theme_classic()</code> | Classic Theme | Displays <code>ggplot</code> without gridlines. The <code>ggtheme</code> documentation has descriptions on additional themes that can be used. |

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|-----------------|--|---|--|
| ggplot2 | <code>xlab(); ylab(); ggtitle()</code> | X Axis Labels; Y Axis Labels; GG Title | Modifies the labels on the x axis and on the y axis, and sets the title of a ggplot , respectively. |
| ggplot2 | <code>facet_wrap()</code> | Facet Wrap | Plots individual graphs using specified variables to subset the data. |
| ggplot2 | <code>ggsave()</code> | GG Save | Saves the last plot in working directory. |
| ggplot2 | <code>last_plot()</code> | Last plot | Returns the last plot produced. |

* This format was adapted from the cheatsheet format from AlexsLemonade.