R Programming for Data Science Workshop

Part 03 (Advanced) – Grammar of Graphics

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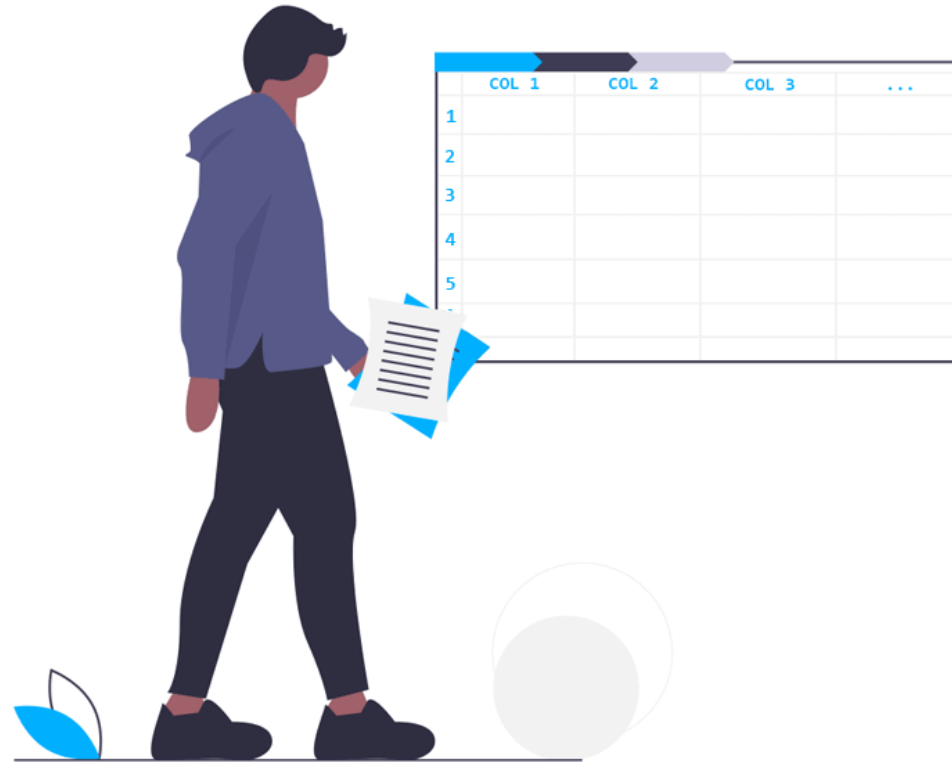
Data Visualization

Hadley Wickham built ggplot2 based on a set of principles outlines in his layered grammar of graphics (inspired by Wilkinson's original grammar of graphics).

ggplot2 has 3 main components.

- Data

- Geoms

- Aesthetics

Data

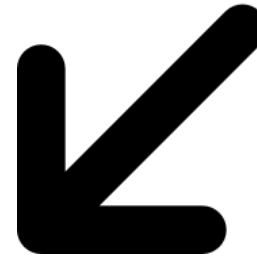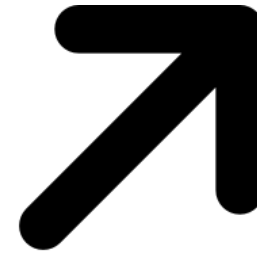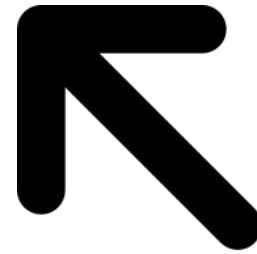A data frame containing the variables that you want to visualize.

Geoms

Geometric objects (circles, lines, text) that you will actually see.

Aesthetics

The mapping from the data to the geographic objects (e.g. by describing position, size, colour, etc).

Here we are going to discuss,

- Layered grammar of graphics

- Scales, axes, legends

- Faceting

- Basic ggplot2 plot types