# State 45 Introduction to mondrian

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- 1. Conventions
- 2. Scatterplots
- 3. Histograms and barcharts

#### Conventions

Click – select single object

Click + drag - select objects in rectangle

Ctrl + mouse over - query

Right-click – plot options

Arrow keys - modify plot parameters

# Histogram

Select carat and price, then click plot > histogram.

Use up and down to control bin width. Press cmd/alt + 0 to rescale y axis. Right click, width > more to set binwidth.

What happens when you press cmd/alt + R?

#### Bar chart

Create bar charts of cut, colour and clarity. Use alt + dragging to correctly order the bars.

What does cmd + R do to a barchart?

# Explore

Use the bar charts + histograms to explore the distribution of price and carat given cut.

#### Brushing

Sometimes it's nice to be able to drag around a rectangle – use cmd + M to turn memory brush

Then drawing a rectangle will create a brush that you can move around

#### Scatterplot

Up and down change point size.

Left and right change opacity.

Remember you can zoom in with cmd/ctrl + drag (cmd/ctrl + click to zoom out)

Right+click + force bins to convert to 2d histogram

# Explore

Use the transform menu to compute log transforms of carat and price.

Use the scatterplot, plus barcharts of colour, clarity and cut to explore which of the three variables has most impact on the price.

(Why do you need to use the scatterplot of price vs. carat?)

# Explore

What can you discover about the relationship between the diamond dimensions (x, y, z) and their price? Or with depth or table?