Cheatography

Data Visualization in R: ggvis continued Cheat Sheet

by shanly3011 via cheatography.com/20988/cs/3867/

ggvis & Group_by

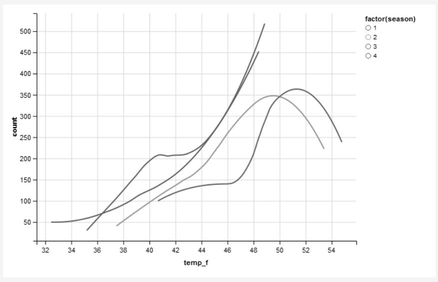
When these 2 are used in conjunction, we can create powerful visualizations.

Code:

```
train_tbl %>%
group_ by( season) %>%
ggvis(temp_f,count, stroke = ~facto r(season)) %
>%
layer_ smo oths()
```

Here, season is a categorical variable. And we have grouped it and then used stroke to highlight the different seasons.

Output



In-Built plot types

```
1. layer_points()
2. layer_ lines()
3. layer_ bars()
4. layer_ smo oths()
5. layer_ his tog rams()
```

Most popular ones cited

Global Vs Local properties

A property that is set inside `ggvis()` is applied globally. While a property set inside `layer_ <ma rks >()` is applied locally. Local properties can override global properties when applicable.

Scale Types

Any visual property in the visualization can be adjus

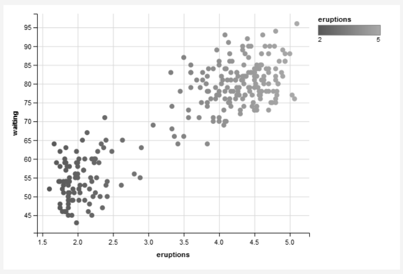
ggvis provides several different functions for creatin

```
 scale_ dat eti me(), scale_ log ical()
um eric(), scale_ sin gular()
```

Code

```
faithful %>%
ggivs(eruptions,waiting, fill = ~erupt
layer_ poi nts() %>%
scale_ num eri c("f ill ", range = c("r ed", " ora nge "))
```

Output



ggvis & interaction ()

We can also group data based on interaction of two or more variables.

`group_by()` creates unique groups for each distin values within the grouping variables.

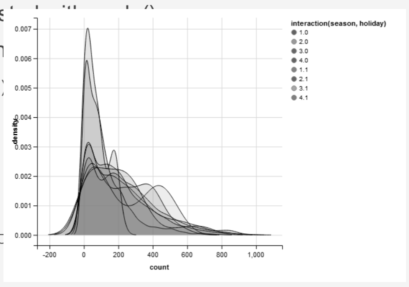
`ungroup()` can remove the grouping information.

`intera ction()` can map the properties to uniqu the variables

Code:

```
train_tbl %>%
group_ by( sea son ,ho liday) %>%
ggvis(count, fill = intera cti on( sea son ,ho liday
)) %>%
layer_ den sit ies()
```

Output



Model Prediction

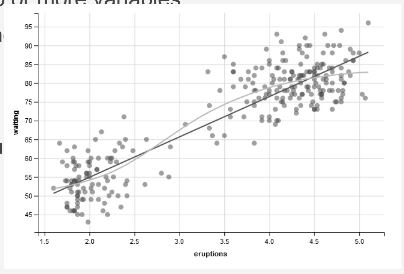
layer_model_predictions() plots the prediction

```
layer_ mod el_ pre dic tio ns( mod
```

Code:

```
faithful %>%
  ggvis(eruptions,waiting) %>%
  layer_ poi nts (fill := " gre en
  layer_ mod el_ pre dic tio ns( m
ed ") %>%
  layer_ smo oth s(s troke := " sk
```

Output



Interactive Plots

ggivs comes several widgets such as

```
 input_ che ckb ox(),
input_ che ckb oxg roup(),
input_ num eric(),
input_ rad iob utt ons(),
 input_ sel ect(),
input_ sli der(), and input_ text
().
```

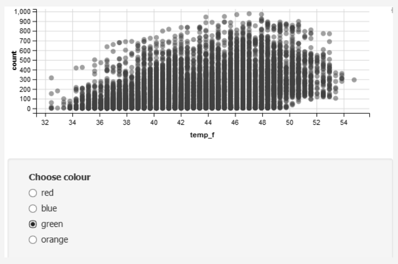
label = "ABCD " , choices = c("red","black") - value = "black" - Used with input_text()

Interactive Plots (cont)

map = as.name used when we want to return variable names

Are the common arguments inside these functions.

Output



Choose colour
- ○ red
- ○ blue
- [✓ ● green]
- ○ orange

Legends & Axis

Axis

You can add axes with `add_axis()`

Syntax:

```
faithful %>%
ggvis(eruptions,waiting) %>%
add_ax is( " x", label = " Eru pti ons ", values = c(1,2, 3,4), subdivide = 9, orient = to
p") %>%
layer_ poi nts()
```

Legends

`ggvis` adds a legend for each property that is specified. To combine multiple legends into a single legend with common values, use a vector of property names.

```
add_le gend()
hide_l egend()
```

Syntax

```
faithful %>%
  ggvis(waiting, eruptions, opacity := 0.6,
        fill = factor (ro und (er upt ions)), shape = factor (ro und (er upt ions)),
        size = ~round (er upt ions)) %>%
    layer_ poi nts() %>%
    add_le gen d(c ("fi ll", " sha pe", " siz e"),
              title = "~ duration (m)", values = c(2, 3, 4, 5))
```