

### Basics

```
import altair as alt
from vega_datasets
import data
cars = data.cars()
alt.Chart(cars).mark_
point().encode(
    x='Horsepower',
    y='Miles_per_Ga-
llon',
    color='Origin',
)
```

### Gallery

Examples Gallery

### Encodings

Channels	X, Y, X2, Y2
Mark Property	Color, Fill, Size, Opacity
Text	Text (for labels), Tooltip
Facet	Column, Row, Facet
Others	Detail, Order

Short form is the same without first Capital letter

### Encoding Data Types

quantitative (Q)	a continuous real-valued quantity
ordinal (O)	a discrete ordered quantity
nominal (N)	a discrete unordered category
temporal (T)	a time or date value
(shorthands)	

### Encoding Options

field	field to encode	
axis	axis's gridlines, ticks, labels	X, Y
bin	True: bin a quantitative var.	X, Y

### Marks

```
mark_area()
mark_line()
mark_bar()
mark_point()
mark_circle()
mark_rect()
mark_text()
mark_tick()
mark_boxplot()
mark_errorband()
mark_errorbar()
```

### Compound Charts

alt.layer(chart1, chart2)	chart1 + chart2
alt.hconcat(c1, c2)	chart1   chart2
alt.vconcat(c1, c2)	chart1 & chart2
chart.facet(facet, row, column)	as a method
chart.repeat(row, column)	as a method

### Altair Cheat Sheet

