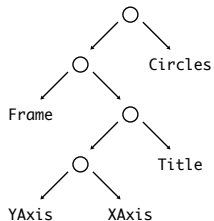


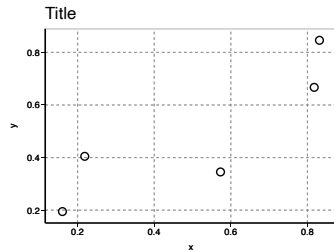
Specification

```
Plot(
  data = df,
  encodings=(
    x=(field=:col_1,datatype=:q),
    y=(field=:col_2,datatype=:q),
    color=(field=:col_2,datatype=:n),
  ),
  ...
)
```

Assembly



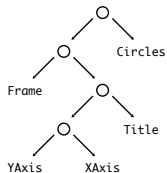
Display



Graphic Expression

```
{(row-> begin
  S(:fill=>row[:color])*
  T(row[:x],row[:y])*Circle()
end)}
```

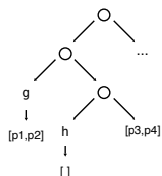
\mathbb{T} Mark



Mark \cong (Type, θ)

```
(XAxis,  $\theta$ )
struct XAxis <: Mark
  axis_ticks
  axis_title
  axis_length
  ...
end
 $\theta(x::XAxis)::\mathbb{T}[\text{Prim}] = \dots$ 
```

$\mathbb{T}[\text{Prim}]$



[Prim]

[g(p1), g(p2), p3, p4...]

Render [Prim] with SVG

```
Circle(r=1) → <center r="1"/>
Circle(r=2) → <center r="2"/>
Line( ... ) → <polyline .../>
```