

# Fyne Toolkit

**01**

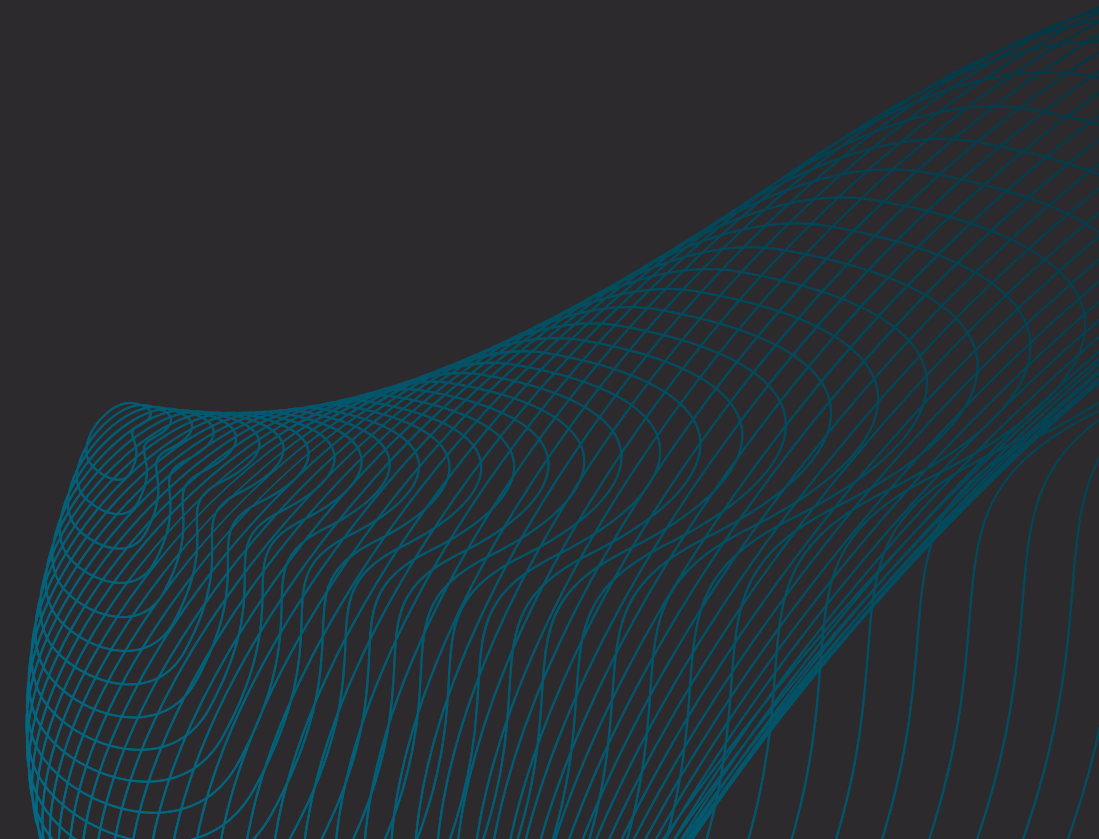
Interfaces

**02**

Layouts

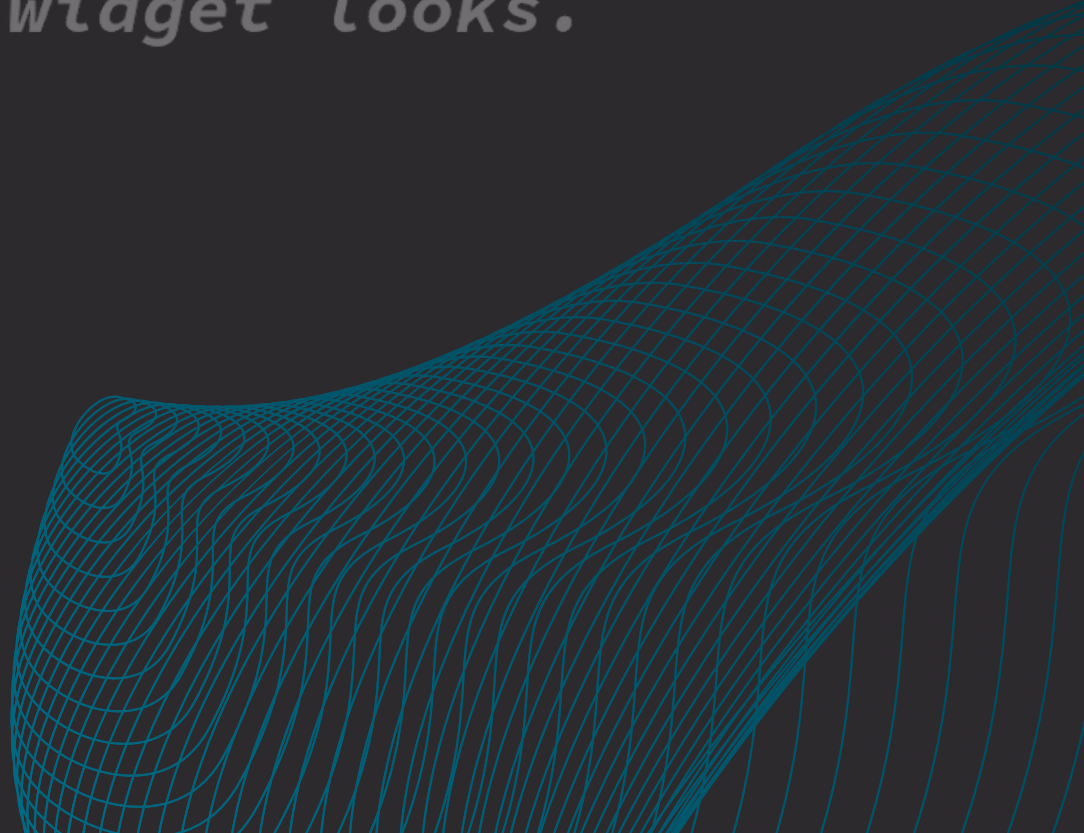
# Mouse Interfaces

```
type Mouseable interface {  
    // Mouse Button pressed.  
    MouseDown(*MouseEvent)  
    // Mouse Button released.  
    MouseUp(*MouseEvent)  
}  
  
type Scrollable interface {  
    // Mouse scroll wheel movement.  
    Scrolled(*ScrollEvent)  
}  
  
type Hoverable interface {  
    // Mouse pointer enters an element.  
    MouseIn(*MouseEvent)  
    // Mouse pointer moved over an element.  
    MouseMoved(*MouseEvent)  
    // Mouse pointer leaves an element.  
    MouseOut()  
}
```



# Widget

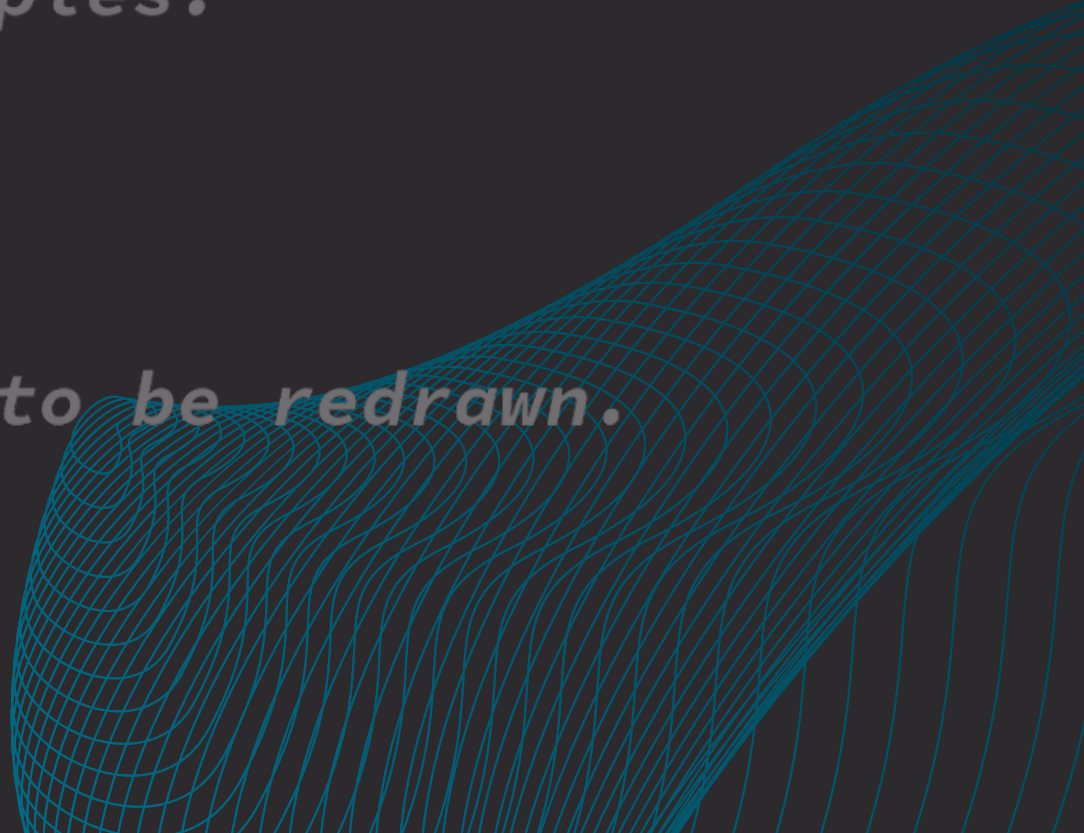
```
type Widget interface {  
    // Base functionality and state for all widgets  
    // (size, position, etc).  
    // Initialized with widget.ExtendBaseWidget(widget).  
    CanvasObject  
    // Creates the renderer which defines how the widget looks.  
    CreateRenderer() WidgetRenderer  
}
```





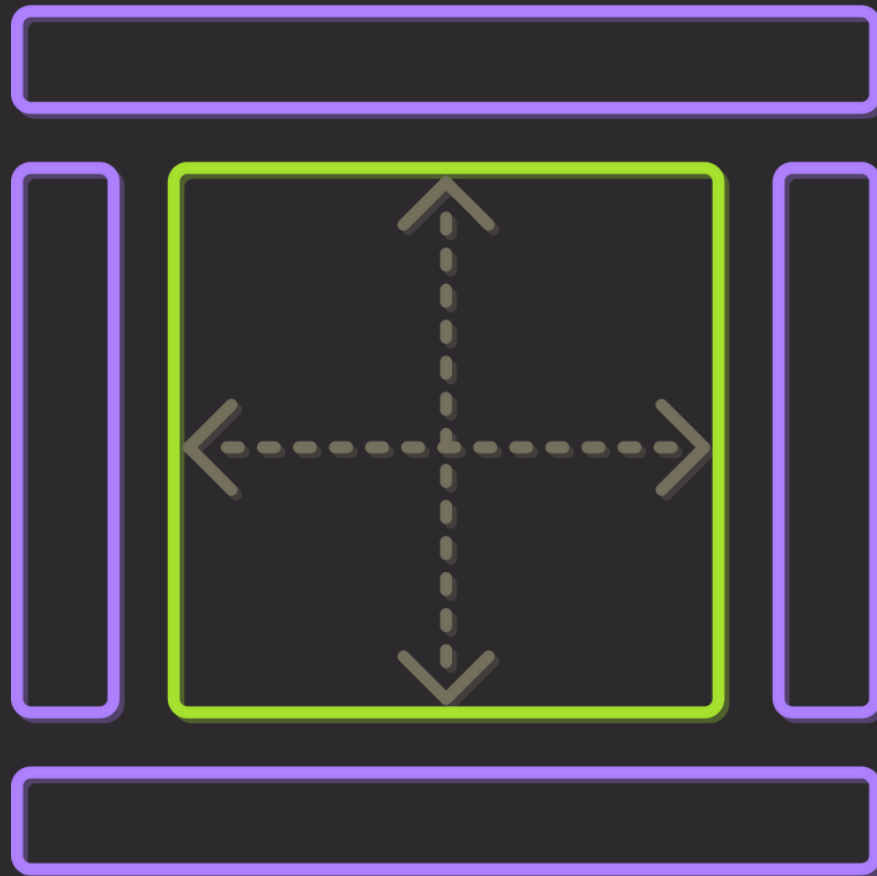
# Widget Renderer

```
type WidgetRenderer interface {  
    // Deprecated: Ignore.  
    BackgroundColor() color.Color  
    // Internal use: leave empty on implementation.  
    Destroy()  
    // Calculate the position of individual objects  
    // that make up this widget.  
    Layout(Size)  
    // Minimum dimensions that this widget occupies.  
    MinSize() Size  
    // All objects that should be drawn.  
    Objects() []CanvasObject  
    // An update occurred and the widget needs to be redrawn.  
    Refresh()  
}
```



# Layout

## Border



## Vbox



## GridWrap

