

### Unstructured Graphics

**collage** : *Int -> Int -> List Form -> Element*

(v1.1.0) Graphics.Collage



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### Creating Forms

**filled** : *Color -> Shape -> Form*

### Creating Forms (cont)

**gradient** : *Gradient -> Shape -> Form*



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### Creating Forms (cont)

**outlined** : *LineStyle -> Shape -> Form*

### Creating Forms (cont)

**textured** : *String -> Shape -> Form*



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### Creating Forms (cont)

**toForm** : *Element* -> *Form*

### Creating Forms (cont)

**traced** : *LineStyle* -> *Path* -> *Form*

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### Grouping Forms

`group` : *List Form -> Form*

### Grouping Forms (cont)

`groupTransform` : *Transform2D -> List Form -> Form*

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### Shapes

**circle** : *Float -> Shape*

circle(radius)

### Shapes (cont)

**ngon** : *Int -> Float -> Shape*

ngon(sides, radius)



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### Shapes (cont)

**oval** : *Float -> Float -> Shape*

oval(width, height)

### Shapes (cont)

**polygon** : *List (Float, Float) -> Shape*

Specify a list of points of the polygon. Shape will automatically close.



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### Shapes (cont)

**rect** : *Float* -> *Float* -> *Shape*

```
rect(width, height)
```

### Shapes (cont)

**square** : *Float* -> *Shape*

```
square(edge_length)
```

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### Images

**image** : *Int -> Int -> String -> Element*

`image(width, height, src)`

### Images (cont)

**fittedImage** : *Int -> Int -> String -> Element*

`fittedImage(width, height, src)`



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### Images (cont)

**croppedImage** :  $(Int, Int) \rightarrow Int \rightarrow Int \rightarrow String \rightarrow Element$

`croppedImage(origin, width, height, src)`

### Images (cont)

**tiledImage** :  $Int \rightarrow Int \rightarrow String \rightarrow Element$

`tiledImage(width, height, src)`

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### Element Inspection

`widthOf` : *Element* -> *Int*

### Element Inspection (cont)

`heightOf` : *Element* -> *Int*



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### Element Inspection (cont)

`sizeOf` : *Element* -> (*Int*, *Int*)

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### Layout Aliases

`layers` : *List Element* -> *Element*

```
layers == flow outward
```



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### Layout Aliases (cont)

**above** : *Element -> Element -> Element*

a above b

### Layout Aliases (cont)

**below** : *Element -> Element -> Element*

a below b



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### Layout Aliases (cont)

**beside** : *Element -> Element -> Element*

a beside b

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### Layout

**flow** : *Direction -> List Element -> Element*



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Layout (cont)

**right** : *Direction*

+X

Layout (cont)

**up** : *Direction*

+Y



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### Layout (cont)

**outward** : *Direction*

+Z

### Layout (cont)

**left** : *Direction*

-X



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### Layout (cont)

**down** : *Direction*

-Y

### Layout (cont)

**inward** : *Direction*

-Z

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### Transforming Forms

**alpha** : *Float* -> *Form* -> *Form*

### Transforming Forms (cont)

**move** : (*Float, Float*) -> *Form* -> *Form*



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### Transforming Forms (cont)

`moveX` : *Float* -> *Form* -> *Form*

### Transforming Forms (cont)

`moveY` : *Float* -> *Form* -> *Form*



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### Transforming Forms (cont)

**rotate** : *Float* -> *Form* -> *Form*

### Transforming Forms (cont)

**scale** : *Float* -> *Form* -> *Form*

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### Paths

**segment** :  $(Float, Float) \rightarrow (Float, Float) \rightarrow Path$

### Paths (cont)

**path** :  $List (Float, Float) \rightarrow Path$

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### Line Style Types

```
type alias LineStyle = {
```

### Line Style Types (cont)

```
> color:Color,
```



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### Line Style Types (cont)

> *width*:Float,

### Line Style Types (cont)

> *cap*:LineCap,



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### Line Style Types (cont)

> *join*:LineJoin,

### Line Style Types (cont)

> *dashing*:List Int,



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### Line Style Types (cont)

```
> dashOffset.Int
```

### Line Style Types (cont)

```
> }
```



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### Line Style Types (cont)

> type **LineCap**

### Line Style Types (cont)

> = *Flat*



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### Line Style Types (cont)

> | *Round*

### Line Style Types (cont)

> | *Padded*



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### Line Style Types (cont)

> type `LineJoin`

### Line Style Types (cont)

> = *Smooth*



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### Line Style Types (cont)

> | *Sharp Float*

### Line Style Types (cont)

> | *Clipped*

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### Line Styles

**dashed** : *Color -> LineStyle*

### Line Styles (cont)

**defaultLine** : *LineStyle*



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### Line Styles (cont)

**dotted** : *Color -> LineStyle*

### Line Styles (cont)

**solid** : *Color -> LineStyle*

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### Element Styling

**width** : *Int*-> *Element*-> *Element*

### Element Styling (cont)

**height** : *Int*-> *Element*-> *Element*



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### Element Styling (cont)

**size** : *Int*-> *Int*-> *Element*-> *Element*

### Element Styling (cont)

**color** : *Color*-> *Element*-> *Element*



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### Element Styling (cont)

**opacity** : *Float -> Element -> Element*

opacity (0.0:transparent - 1.0:opaque)

### Element Styling (cont)

**link** : *String -> Element -> Element*

create Element that is a hyper-link



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### Element Styling (cont)

**tag** : *String -> Element -> Element*

similar to `<a>` with ID

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### Positioning Elements

**empty** : *Element*

flow down [ `img1`, if `showMore` then `img2` else `empty` ]



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### Positioning Elements (cont)

**spacer** : *Int -> Int -> Element*

Empty Box

### Positioning Elements (cont)

**container** : *Int -> Int -> Position -> Element -> Element*

Put an element in a container. By setting the color of the container, you can create borders.

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### Named Positions

**topLeft** : *Position*

### Named Positions (cont)

**> midTop** : *Position*



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### Named Positions (cont)

> **topRight** : *Position*

### Named Positions (cont)

> -----



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### Named Positions (cont)

> **midLeft** : *Position*

### Named Positions (cont)

> **middle** : *Position*



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### Named Positions (cont)

> **midRight** : *Position*

### Named Positions (cont)

> -----



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### Named Positions (cont)

> **bottomLeft** : *Position*

### Named Positions (cont)

> **midBottom** : *Position*



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### Named Positions (cont)

> **bottomRight** : *Position*

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