

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) -> (Float, Float) -> Path*

Paths (cont)

path : *List (Float, Float) -> 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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