

Deck



a Go package for presentations

DECK: a package for presentations

Deck is a package written in Go

That uses a singular markup language

With elements for text, lists, code, and graphics

All layout and sizes are expressed as percentages

Clients are interactive or create formats like PDF or SVG

Elements

Hello, World

A block of text, word-wrapped to a specified width.
You may specify size, font, color, and opacity.

```
package main

import "fmt"

func main() {
    fmt.Println("Hello, World")
}
```

<text>...</text>

plain

Point A

Point B

Point C

Point D

bullet

- First item
- Second item
- The third item
- and the last thing

number

1. This
2. That
3. The other
4. One more

```
<list>...</list>
```

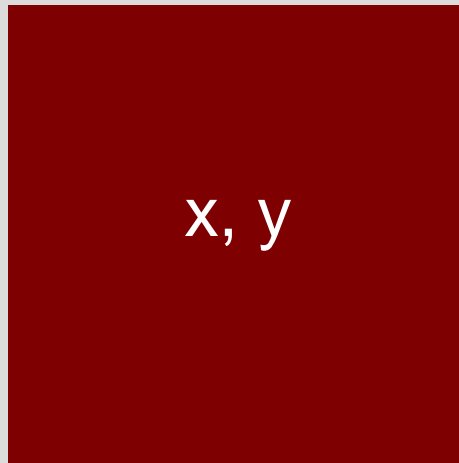
height



width

```
<image ... />
```

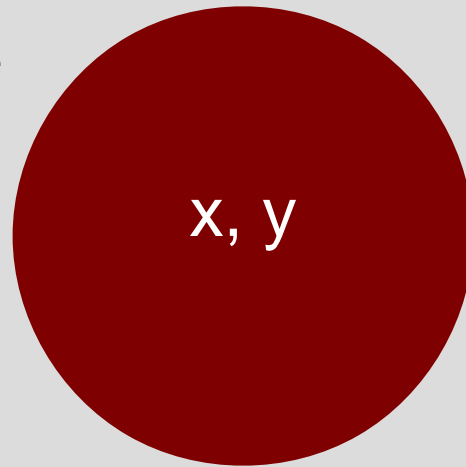
height (relative
to element
or canvas
width)



width

```
<rect ... />
```

height (relative
to element
or canvas
width)



width

```
<ellipse ... />
```




```
<line .../>
```

angle2 (90 deg)

x, y angle1 (0 deg)

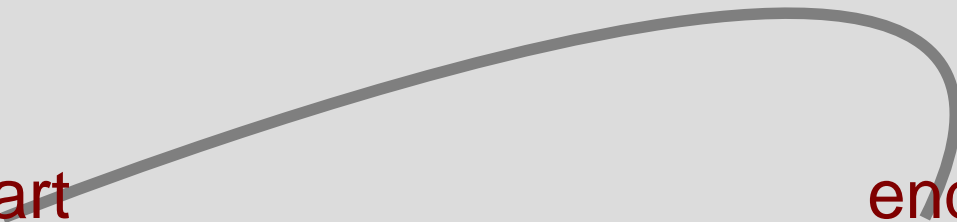
<arc ... />

control

start

end

<curve ... />



Markup and Layout

Start the deck	<code><deck></code>
Set the canvas size	<code><canvas width="1024" height="768" /></code>
Begin a slide	<code><slide bg="white" fg="black"></code>
Place an image	<code><image xp="70" yp="60" width="256" height="179" name="work.png" caption="Desk"/></code>
Draw some text	<code><text xp="20" yp="80" sp="3">Deck uses these elements</text></code>
Make a bullet list	<code><list xp="20" yp="70" sp="2" type="bullet"></code> <code>text, list, image</code> <code>line, rect, ellipse</code> <code>arc, curve</code>
End the list	<code></list></code>
Draw a line	<code><line xp1="20" yp1="10" xp2="30" yp2="10"/></code>
Draw a rectangle	<code><rect xp="35" yp="10" wp="4" hr="75" color="rgb(127,0,0)"/></code>
Draw an ellipse	<code><ellipse xp="45" yp="10" wp="4" hr="75" color="rgb(0,127,0)"/></code>
Draw an arc	<code><arc xp="55" yp="10" wp="4" hp="3" a1="0" a2="180" color="rgb(0,0,127)"/></code>
Draw a quadratic bezier	<code><curve xp1="60" yp1="10" xp2="75" yp2="20" xp3="70" yp3="10" /></code>
End the slide	<code></slide></code>
End of the deck	<code></deck></code>

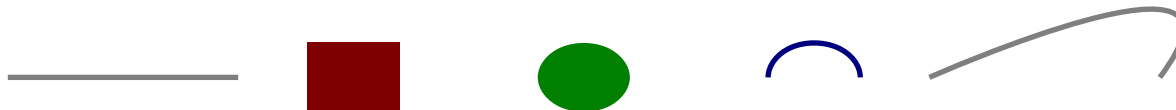
Anatomy of a Deck

Deck uses these elements

- text, list, image
- line, rect, ellipse
- arc, curve



Desk



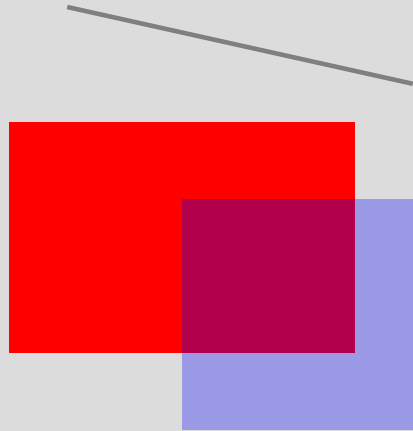
Text and List Markup

Position, size	<code><text xp="..." yp="..." sp="..."></code>
Block of text	<code><text ... type="block"></code>
Lines of code	<code><text ... type="code"></code>
Attributes	<code><text ... color="..." opacity="..." font="..." align="..."></code>
<hr/>	
Position, size	<code><list xp="..." yp="..." sp="..."></code>
Bullet list	<code><list ... type="bullet"></code>
Numbered list	<code><list ... type="number"></code>
Attributes	<code><list ... color="..." opacity="..." font="..." align="..."></code>

Common Attributes for text and list

<code>xp</code>	horizontal percentage
<code>yp</code>	vertical percentage
<code>sp</code>	font size percentage
<code>type</code>	"bullet", "number" (list), "block", "code" (text)
<code>align</code>	"left", "middle", "end"
<code>color</code>	SVG names ("maroon"), or RGB "rgb(127,0,0)"
<code>opacity</code>	percent opacity (0-100, transparent - opaque)
<code>font</code>	"sans", "serif", "mono"

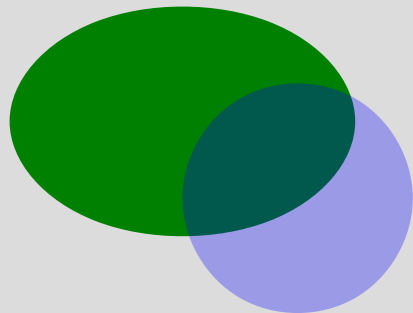
Graphics Markup



```
<line xp1="5" yp1="75" xp2="20" yp2="70" sp="0.2"/>
```

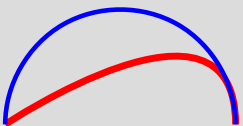
```
<rect xp="10" yp="60" wp="15" hr="66.6" color="red"/>
```

```
<rect xp="15" yp="55" wp="10" hr="100" color="blue" opacity="30"/>
```



```
<ellipse xp="10" yp="35" wp="15" hr="66.66" color="green"/>
```

```
<ellipse xp="15" yp="30" wp="10" hr="100" color="blue" opacity="30"/>
```



```
<curve xp1="5" yp1="10" xp2="15" yp2="20" xp3="15" yp3="10" sp="0.3" color="red"/>
```

```
<arc xp="22" yp="10" wp="10" hp="10" a1="0" a2="180" sp="0.2" color="blue"/>
```

A square grid with a light gray background and a thin blue border. The grid is composed of 10 columns and 10 rows. The horizontal axis (x-axis) is labeled with values 10, 20, 30, 40, 50, 60, 70, 80, and 90 at the top. The vertical axis (y-axis) is labeled with values 10, 20, 30, 40, 50, 60, 70, 80, and 90 on the left. The text "Percent Grid" is centered in the grid in a large, black, sans-serif font.

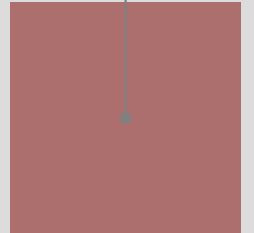
10%, 50%

Hello

50%, 50%



90%, 50%



Percentage-based layout

Design Examples

Two Columns

One

Two

Three

Four



Tree and Sky

Five

Six

Seven

Eight



Rocks

A few months ago, I had a look at the brainchild of a few serious heavyweights working at Google. Their project, the Go programming language, is a static typed, c lookalike, semicolon-less, self formatting, package managed, object oriented, easily paralellizable, cluster fuck of genius with an unique class inheritance system. It doesn't have one.

The Go Programming Language

is a static typed,
c lookalike,
semicolon-less,
self formatting,
package managed,
object oriented,
easily paralellizable,
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It doesn't have one.

So, the next time you're about to make a subclass, think hard and ask yourself

what would Go do



A dramatic sky scene featuring a bright sunburst breaking through a layer of clouds. The sun is positioned in the upper right quadrant, creating a strong lens flare effect. The clouds are dark and textured, with the sun's light illuminating the edges of some clouds. The overall color palette is dominated by deep blues and greys, with the bright white of the sun providing a stark contrast.

Deck is heavenly

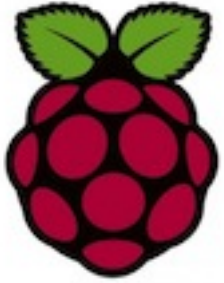
Clients

A Deck Client

```
package main

import (
    "fmt"
    "log"
    "github.com/ajstarks/deck"
)

func main() {
    presentation, err := deck.Read("deck.xml", 1024, 768) // open the deck
    if err != nil {
        log.Fatal(err)
    }
    for slidenumber, slide := range presentation.Slide { // for every slide...
        fmt.Println("Processing slide", slidenumber)
        for _, t := range slide.Text { // process the text elements
            x, y, size := deck.Dimen(presentation.Canvas, t.Xp, t.Yp, t.Sp)
            dotext(x, y, size, t)
        }
        for _, l := range slide.List { // process the list elements
            x, y, size := deck.Dimen(presentation.Canvas, l.Xp, l.Yp, l.Sp)
            dolist(x, y, size, l)
        }
    }
}
```



```
go get github.com/ajstarks/deck/vgdeck
```



```
go get github.com/ajstarks/deck/pdfdeck
```



```
go get github.com/ajstarks/deck/svgdeck
```

pdfdeck [options] file.xml...

- sans, -serif, -mono [font] specify fonts
- pagesize [Letter, Legal, Tabloid, A2, A3, A4, A5, ArchA, Index, 4R, Widescreen]
- pagewidth [page width (pt)]
- pageheight [page height (pt)]
- stdout (output to standard out)
- outdir [directory] directory for PDF output
- fontdir [directory] directory containing font information
- author [author name] set the document author
- title [title text] set the document title
- grid [percent] draw a percent grid on each slide

`svgdeck [options] file.xml...`

`-sans, -serif, -mono [font]` specify fonts

`-pagesize [Letter, Legal, A3, A4, A5]`

`-pagewidth [canvas width]`

`-pageheight [canvas height]`

`-stdout` (output to standard out)

`-outdir [directory]` directory for PDF output

`-title [title text]` set the document title

`-grid [percent]` draw a percent grid on each slide

vgdeck [options] file.xml...

-loop [duration] loop, pausing [duration] between slides

-slide [number] start at slide number

-w [width] canvas width

-h [height] canvas height

-g [percent] draw a percent grid

vgdeck Commands

`+, Ctrl-N, [Return]`

Next slide

`-, Ctrl-P, [Backspace]`

Previous slide

`^, Ctrl-A`

First slide

`$, Ctrl-E`

Last slide

`r, Ctrl-R`

Reload

`x, Ctrl-X`

X-Ray

`/, Ctrl-F [text]`

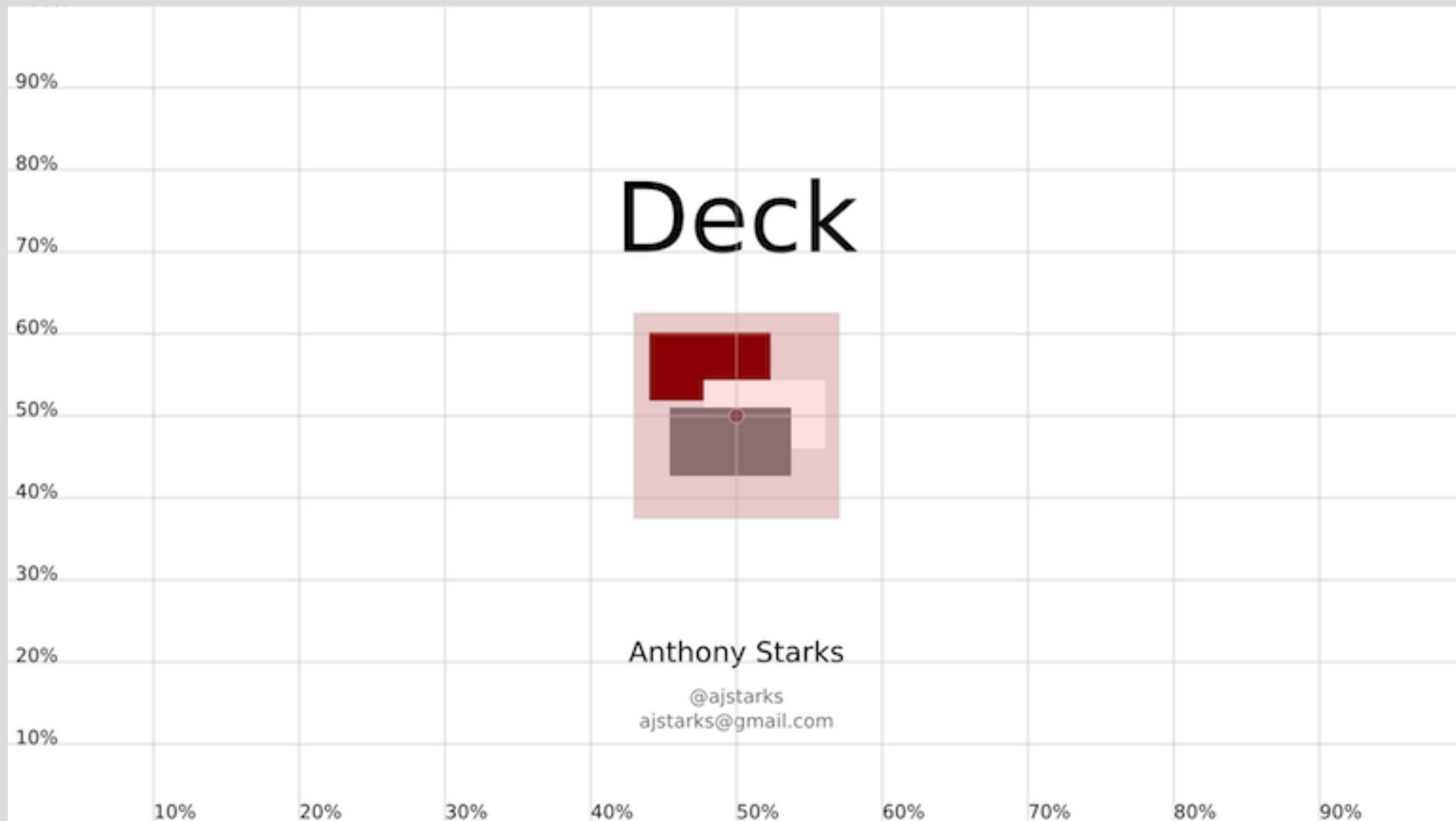
Search

`s, Ctrl-S`

Save

`q`

Quit



X-Ray mode shows the percent grid, and highlights images

github.com/ajstarks/deck



ajstarks@gmail.com