

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>
```

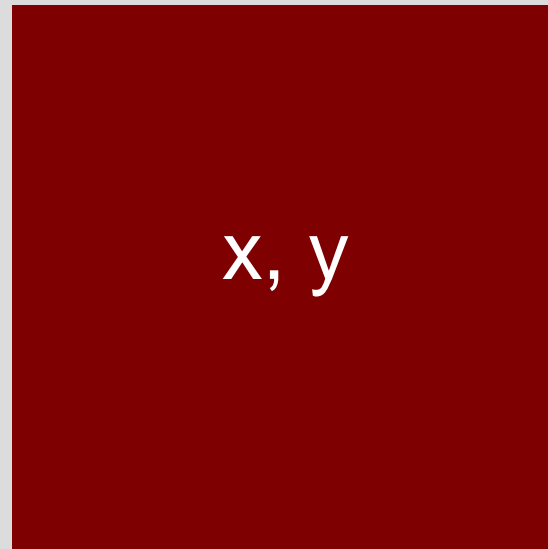
height



width

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

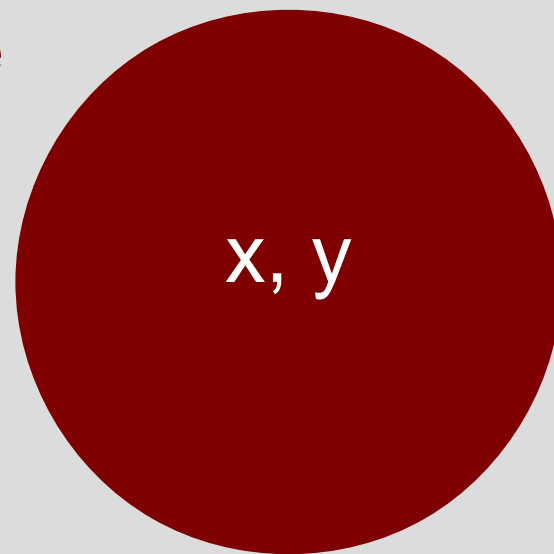
height (relative
to element
or canvas
width)



width

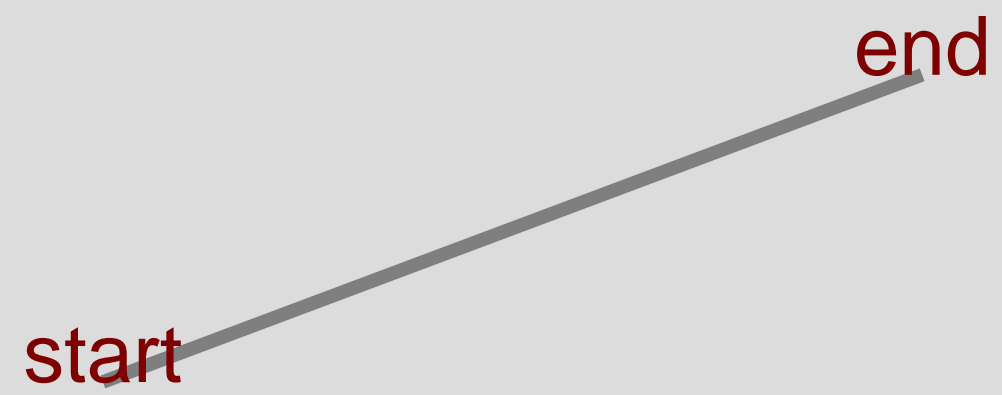
```
<rect ... />
```

height (relative
to element
or canvas
width)



width

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

`<line ... />`

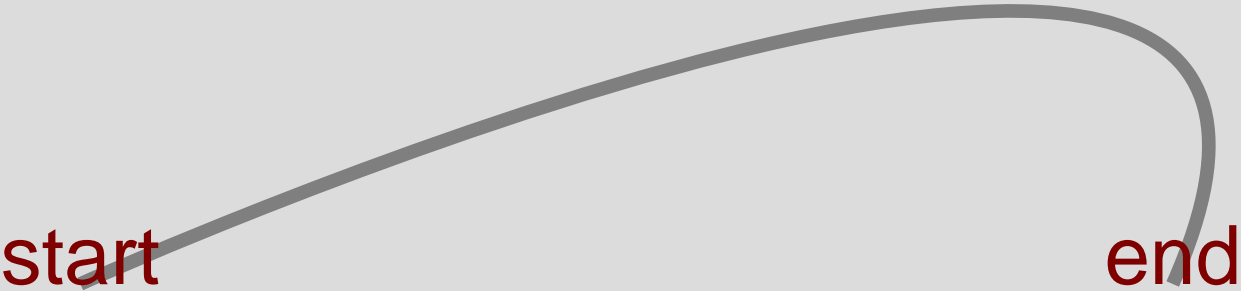
angle2 (90 deg)

x, y angle1 (0 deg)

A diagram illustrating an arc. A gray arc starts at a point labeled 'x, y' and ends at a point labeled 'angle1 (0 deg)'. The arc is labeled 'angle2 (90 deg)'.

<arc . . . />

control



<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> |

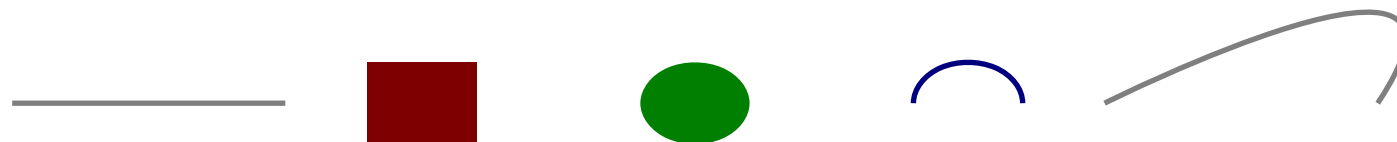
Anatomy of a Deck

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> |

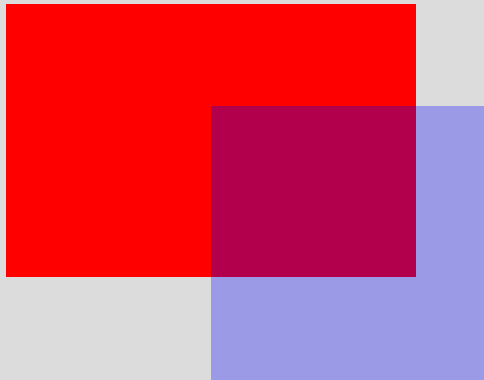
Common Attributes for text and list

| | |
|----------------------|---|
| <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"/>
```



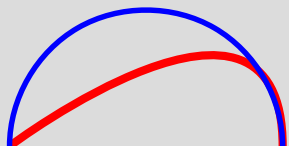
```
<rect xp="10" yp="60" wp="15" hr="66.6" color="red"/>
```

```
<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" wp="10" a1="0" a2="180" sp="0.2" color="blue"/>
```

A Percent Grid with a 10x10 grid of squares. The horizontal axis is labeled 10, 20, 30, 40, 50, 60, 70, 80, 90. The vertical axis is labeled 10, 20, 30, 40, 50, 60, 70, 80, 90. The text "Percent Grid" is centered in the grid.

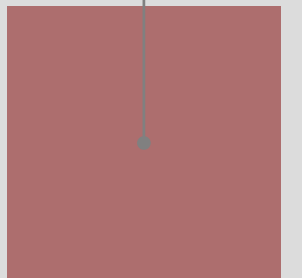
10%, 50%

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,
cluster fuck of genius
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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.

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

what would Go do





Deck is heavenly

FOR, LO,

the winter is past,

the rain is over and gone;

The flowers appear on the earth;

the time for the singing of birds is come,

and the voice of the turtle is heard in our land.

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]`

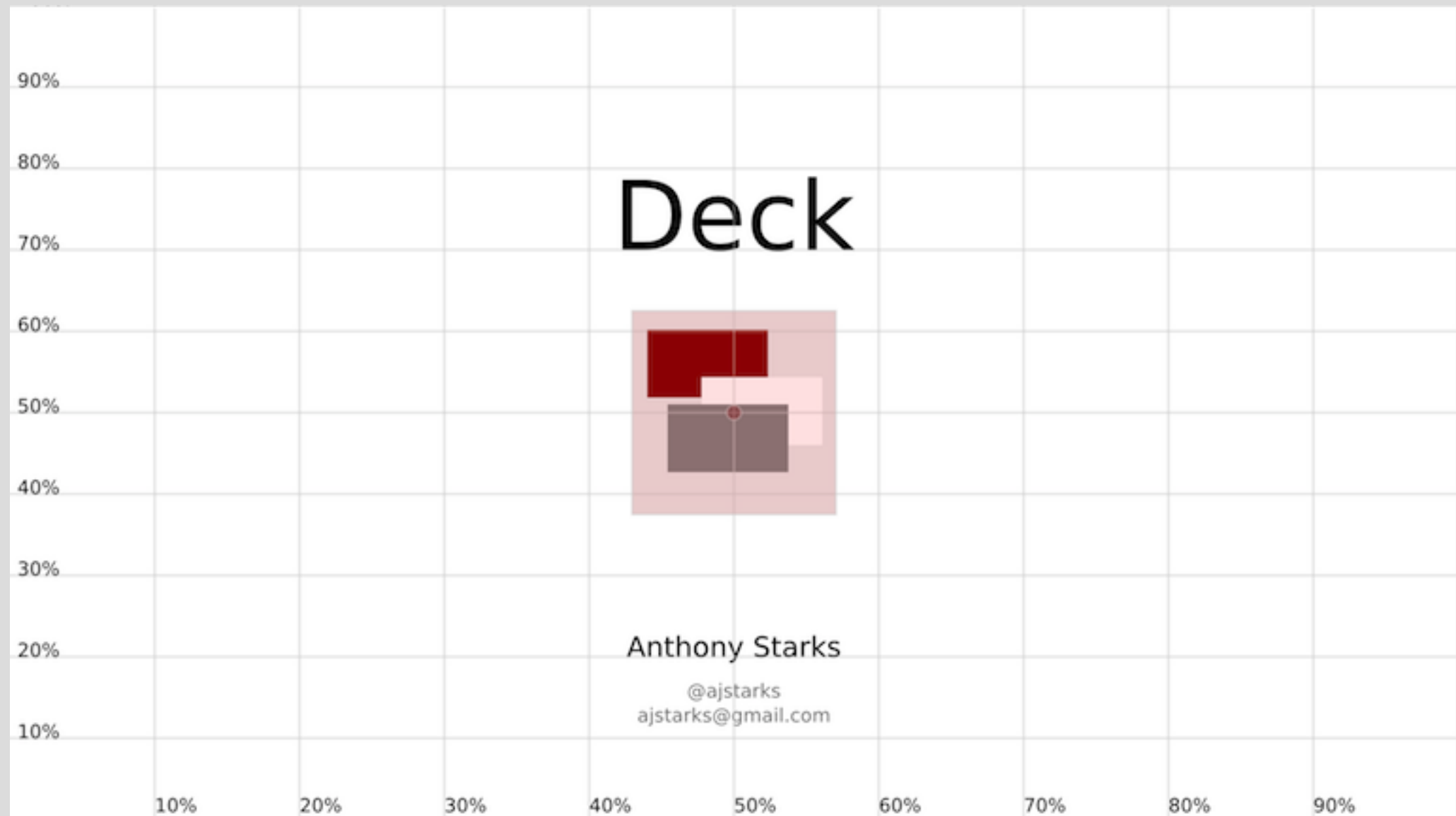
Search

`s, Ctrl-S`

Save

`q`

Quit



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

github.com/ajstarks/deck



ajstarks@gmail.com