



GSS

Grid Style Sheets

GSS is a **CSS preprocessor** &
JS runtime that harnesses
Cassowary.js

GSS polyfills layout languages including
Greg Badros's Constraint CSS (**CCSS**)
and Apple's Visual Format Language
(**VFL**)

declare **constraints** to
express the layout you
want

the mathematical **solver** will figure out CSS values
that produce your layout

Why **GSS**

focus on **What**
instead of **How**

One of **Hacker News** Top Post

<http://howtocenterincss.com/>

Responsive Elements

“Element Queries” — why limit responsiveness to viewport?

multiple constraints on
same element for layout
adjustment

Source Order **Independence**

center any element within any other with one line

Virtual Elements

Layout in constraints

Cassowary is a linear
arithmetic constraint
solver

0,0

0 + viewport width

x, y (left, top)

x + width (right)



y + height (bottom)

bottom + width

x == 20; // is a linear expression

x + width == 200; // is a linear expression



div-a

div-b

`div-a[x] == 20;`

`div-b[left] == div-a[right] + 20;`

`div-a[width] + div-b[width] < 500;`

`div-a[width] == div-b[width] !strong;`

All linear expressions

VFL

```
.container {  
  @h |-(#btn1)-(#btn2)-(#btn3)-| in(&) gap(btn-gap)  
  outer-gap(btn-outer-gap) {  
    &top == :next[top];  
  }  
}
```


GSS in real world

pre-computation
gss react
using it at TheGrid



[www.**GridStyleSheets**.org](http://www.GridStyleSheets.org)