

Shapy: Images with CSS Gradients & Vue.js 🤖 🎨

Victoria Bergquist, @vicbergquist
Vue Conf Toronto, November 15 2018

Victoria Bergquist, who? 🦄

Front End Dev & Community Manager

@melsicon 🏢

CSS Frankfurt & Vue.js Frankfurt 🐱

Vue Vixens DE 🦊

Cats & M&Ms ❤️ (donations welcome)



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What is Shapy? 🤔

A CSS gradients generator + more



Play around
with gradients



Be a
CSS artist



Copy code
(like a pro)

Pre-talk demo! 🤯

Let's see what Shapy is!

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Origin 🌈

CSS 🥰

JavaScript 😐

#DailyCSSImages

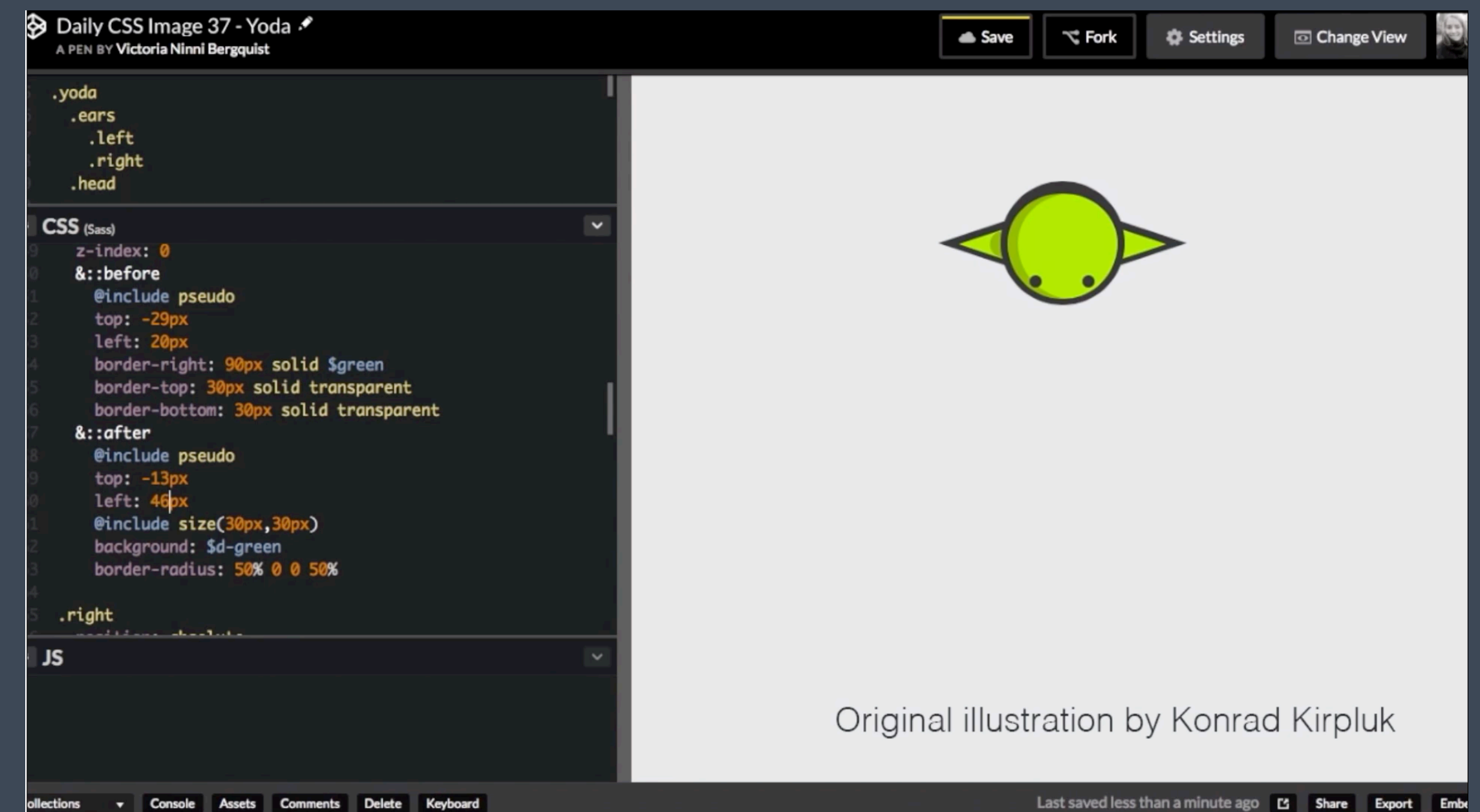


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Origin 🌈

#DailyCSSImages

Daily e-mail prompts
to make CSS images



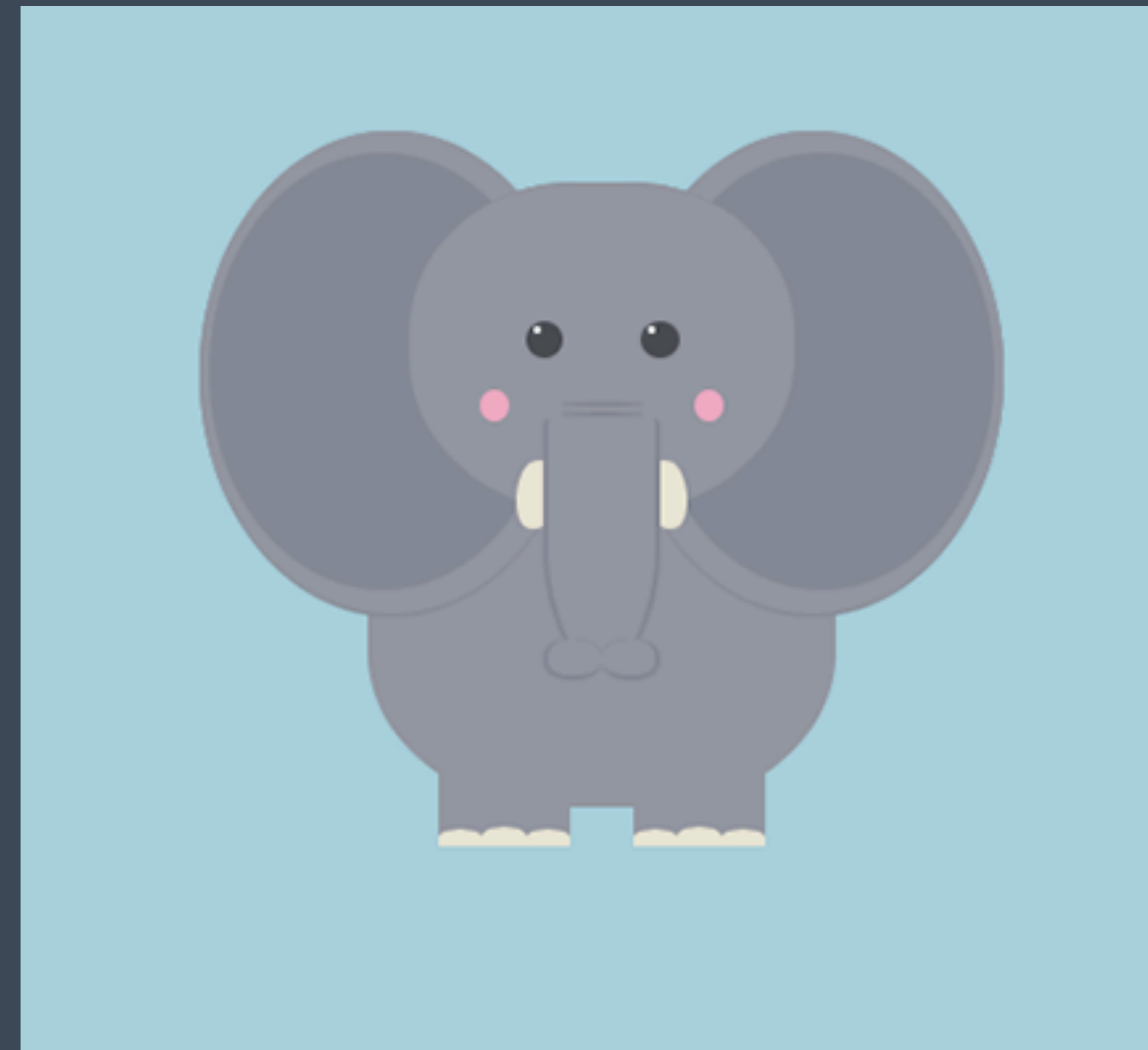
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#DailyCSSImages

Level 1:

One tag per shape



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#DailyCSSImages

Level 2:

Fewer tag +

Pseudo elements



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#DailyCSSImages

God level:

One tag +
pseudo elements +
gradients

a.singlediv.com by

Lynn Fisher



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😱
CSS only

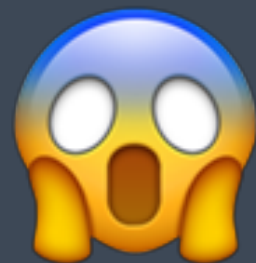


😱
CSS only

What kind of magic is this? 😭

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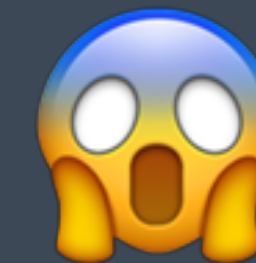
Origin 🌈



```
#padme-amidala div {  
  width: 150px;  
  height: 120px;  
  margin-left: -75px;  
  margin-top: -60px;  
  background-color:  
  background-repeat:  
  background-image:  
  gradient(115deg, transparent 40%, #daa520 40%),  
  gradient(to top, #a0522d 54%, #a0522d 54%, #a0522d 54%, #a0522d 54%);  
  background-size:  
  background-position:  
  border-top-left-radius:  
  border-top-right-radius:  
  border-bottom-left-radius:  
  border-bottom-right-radius:  
  -webkit-box-shadow:  
  box-shadow: inset 0px 0px 0px 0px; }  
}
```



```
main.css:1:154  
  , linear-gradient(-115deg, transparent 40%, #daa520 40%), linear-gradient(to top, #a0522d 54%, #a0522d 54%, #a0522d 54%, #a0522d 54%);  
  background-size: 100% 105%;  
  border-top-left-radius: 6px; border-top-right-radius: 8px; border-bottom-left-radius: 6px; border-bottom-right-radius: 8px;  
  -webkit-box-shadow: 0px 0px 0px 0px; box-shadow: 0px 0px 0px 0px; }  
}
```



wtf 😓

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Origin 🌈

There's a generator for that, right?

I don't know 🙄

Origin 🌈

A year later: I still don't know.



But let's just make one!

Origin 🌈

But JavaScript 😐



But Vue.js! 🥰



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Origin 🌈

But JavaScript 🙄



Slow progress...

```
JS
.value
20 let inputColor =
  document.getElementById('color').value;
21 let inputHeight =
  document.getElementById('height').value;
22 let inputWidth =
  document.getElementById('width').value;
23 let inputCoordY =
  document.getElementById('coordY').value;
24 let inputCoordX =
  document.getElementById('coordX').value;
25 let inputComment =
  document.getElementById('comment').value;
26 switch(inputShape) {
27   case 'circle':
28     shapes.unshift(`/*${inputComment}*/ radial-
  gradient(${inputHeight}px ${inputWidth}px at
  ${inputCoordX}% ${inputCoordY}%, ${inputColor} 49%,
  transparent 50%)`);
29     break;
30   case 'square':
31     shapes.unshift(`/*${inputComment}*/
  linear-gradient(${inputColor}, ${inputColor})
  ${inputCoordY}% ${inputCoordY}% / ${inputWidth}px
```

☐ Circle

☒ Square

Color

green

Width (px)

100

Height (px)

100

Placement X axis (%)

50

Placement Y axis (%)

50

Comment

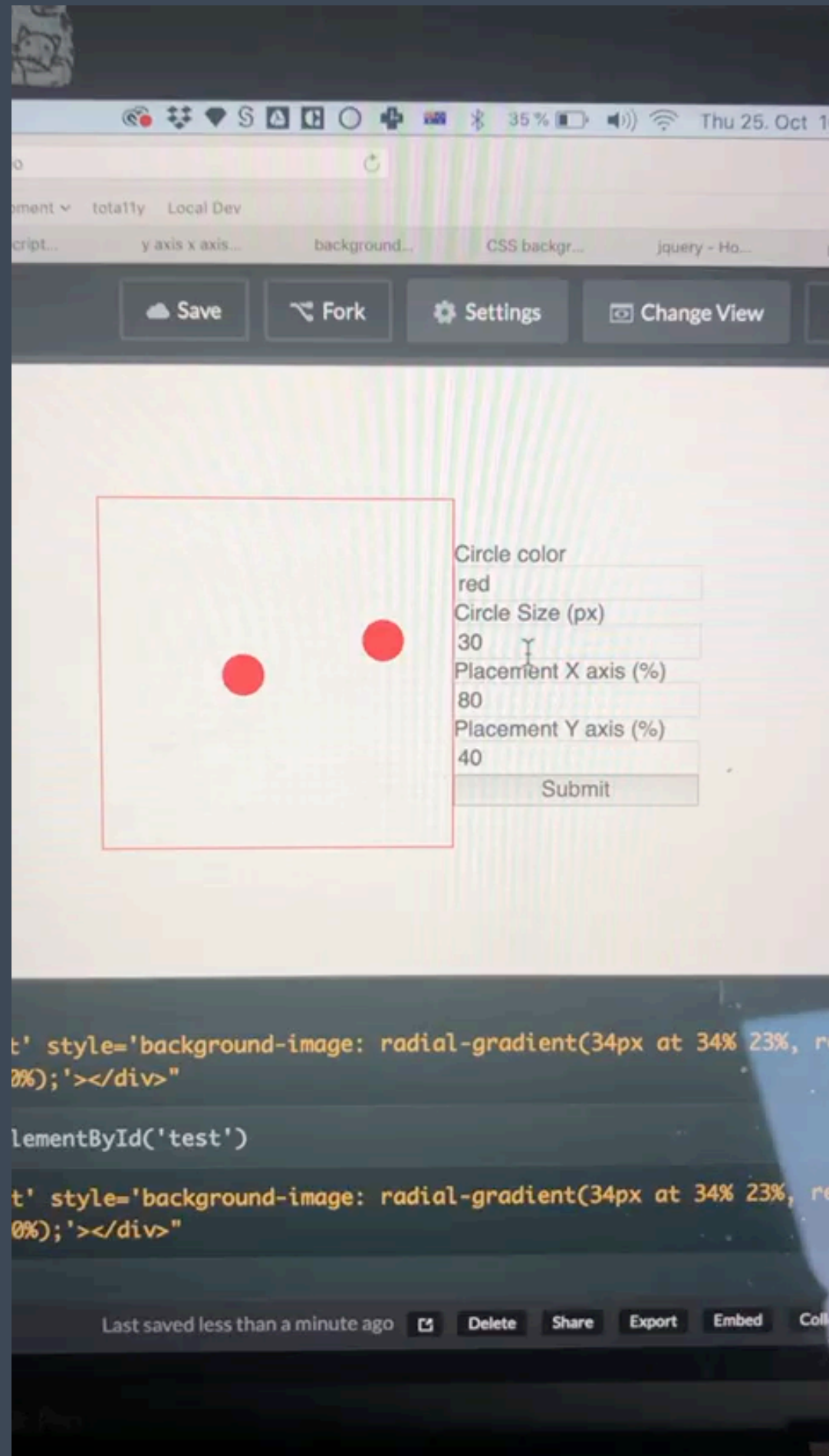
hello

Submit

background: /*hello*/ linear-gradient(green, green) 50% 50% / 100px 100px;

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Origin



```
JS
.value
20   let inputColor =
document.getElementById('color').value;
21   let inputHeight =
document.getElementById('height').value;
22   let inputWidth =
document.getElementById('width').value;
23   let inputCoordY =
document.getElementById('coordY').value;
24   let inputCoordX =
document.getElementById('coordX').value;
25   let inputComment =
document.getElementById('comment').value;
26   switch(inputShape) {
27     case 'circle':
28       shapes.unshift(`/*${inputComment}*/ radial-
gradient(${inputHeight}px ${inputWidth}px at
${inputCoordX}% ${inputCoordY}%, ${inputColor} 49%,
transparent 50%)`);
29       break;
30     case 'square':
31       shapes.unshift(`/*${inputComment}*/
linear-gradient(${inputColor}, ${inputColor}
${inputCoordX}% ${inputCoordX}% / ${inputWidth}px
${inputCoordY}% ${inputCoordY}%)`);
```

Circle

Square

Color

green

Width (px)

100

Height (px)

100

Placement X axis (%)

50

Placement Y axis (%)

50

Comment

hello

Submit

```
background: /*hello*/ linear-gradient(green, green) 50% 50% / 100px 100px;
```

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Origin 🌈



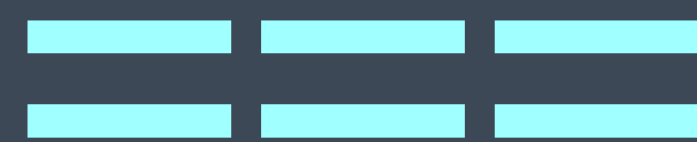
But Vue.js 🥰

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Origin 🌈

But Vue.js 😍

Gentle & Supportive

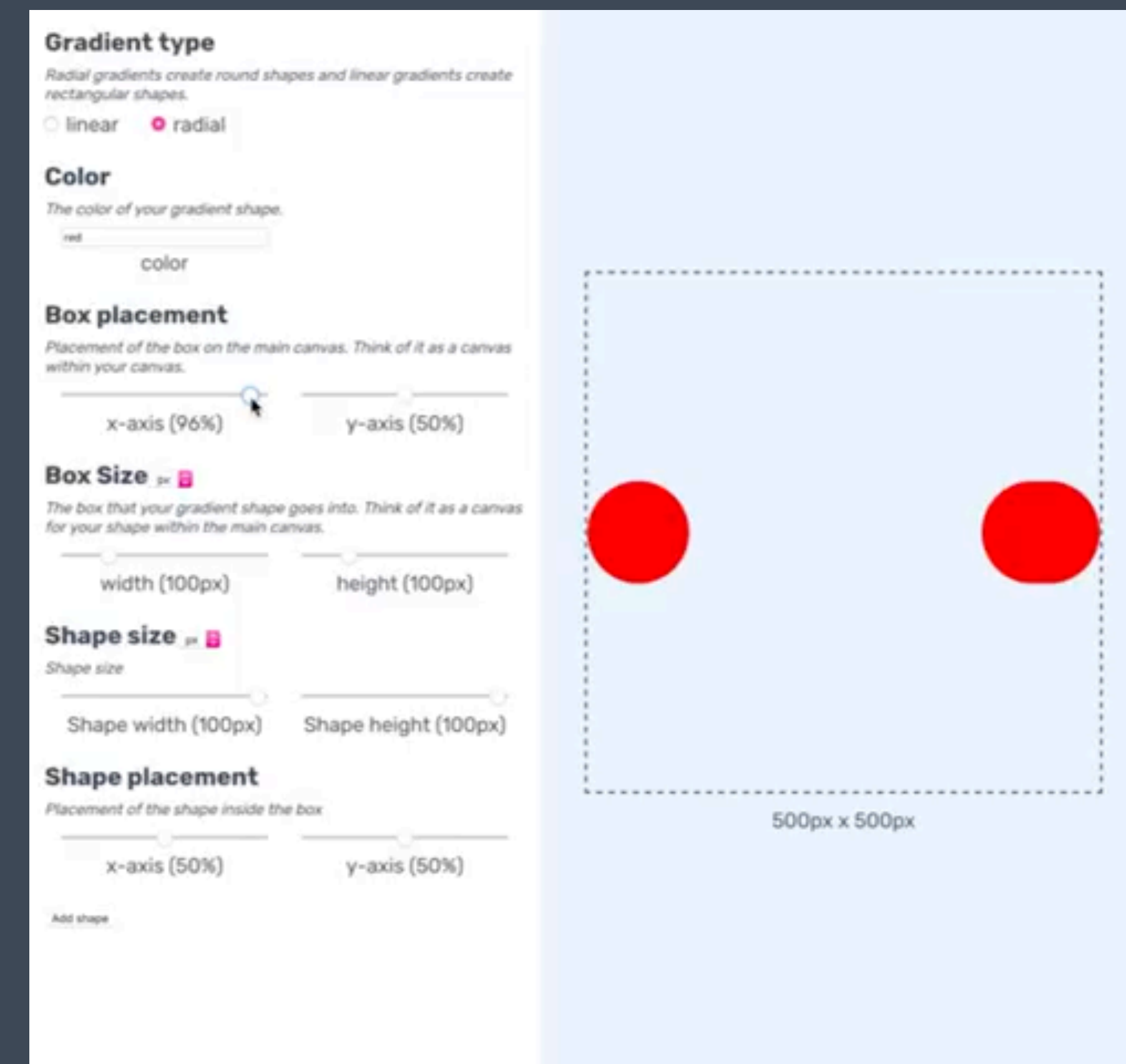
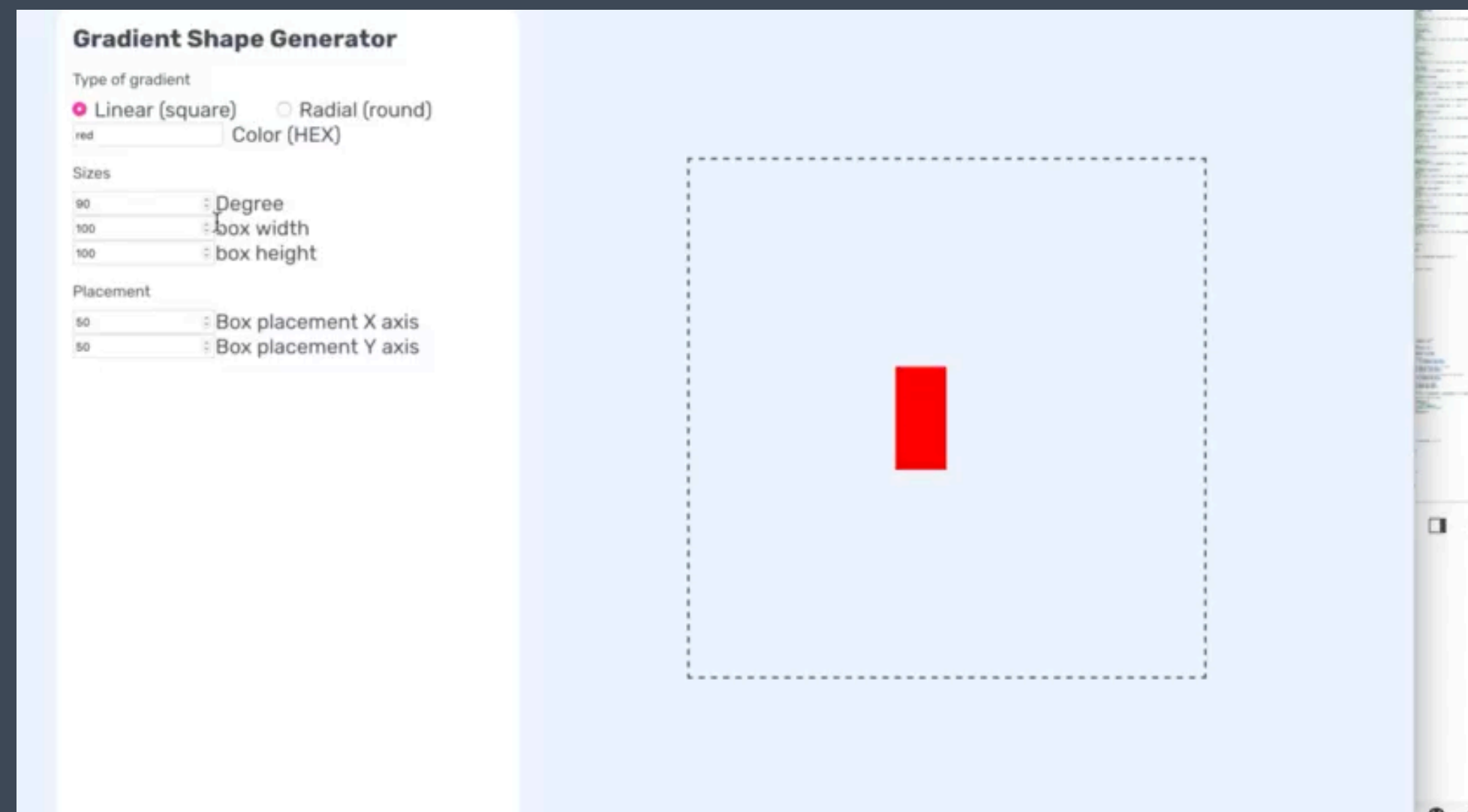



Makes all your
ideas come true!

productivity++

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Origin 🌈



I WAS ON A ROLL 😎

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The How 🤔

Learn how CSS gradients work:

background-**color**

background-**image**

background-**position**

background-**repeat**

background-**size**

+ more



Shorthand:
background

The How 🤔

Learn how CSS gradients work

radial-gradient(

Width Height at **X-axis Y-axis**,

Color start, Color stop)

no-repeat

X-axis Y-axis / **Width Height**

linear-gradient(

Direction,

Color start, Color stop)

no-repeat

X-axis Y-axis / **Width Height**)

The How 🤔

What did I use to build Shapy?

Vuex

vuex-map-fields

vue-color

vue-meta

vue-highlightjs

(vue-router)

The How 🤔

Gather your data: input fields in a form x 1000.

V-model everything!

Box Details 📦 Hide

The box your shape goes into.

Width:	100 %	Height:	100 %
<input type="range"/>		<input type="range"/>	
X-axis:	50 %	Y-axis:	50 %
<input type="range"/>		<input type="range"/>	

Shape in Box 📐 Show

Edit the size and placement of the shape inside the box you edit above.

Width:	50 %	Height:	50 %
<input type="range"/>		<input type="range"/>	

```
..<!-- WIDTH INPUT (%/px) -->
..<input-wrapper
...  v-model="box.size.x"
...  :label="'Width'"
...  :name="'box-size-x'"
...  :what="box.size.x"/>

..<!-- HEIGHT INPUT (%/px) -->
..<input-wrapper
...  v-model="box.size.y"
...  :label="'Height'"
...  :name="'box-size-y'"
...  :what="box.size.y"/>
```

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The How 🤔

Gather your data: update the store on changes

```
└─ store
  └─ modules
    JS box.js
    JS canvas.js
    JS colors.js
    JS general.js
    JS shape.js
    JS store.js
```

```
· box: {
·   · size: {
·     · x: {
·       · unit: '%',
·       · size: 100
·     · },
·     · y: {
·       · unit: '%',
·       · size: 100
·     · }
·   · },
·   · }
```

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The How 🤔

Turn it into a string

```
`${type}(  
    ${shape},  
    ${repeat}  
    ${colors})  
    ${box}`
```


The How 🤔

Turn it into a string

```
gradientString() {  
  // TYPE  
  const type = this.general.type  
  // REPEATING  
  const repeat = this.general.repeat  
  // COLORS  
  const colors = this.colorStops  
  // COMMENT  
  const comment = this.general.comment  
  // DEGREE  
  const degree = this.general.degree.size + this.general.degree.unit  
  // BOX  
  const box = this.boxCombined  
  // SHAPE  
  const shape = this.shapeCombined  
  
  if (type === 'radial-gradient') {  
    return `/* ${comment} */ ${type}(${shape}, ${colors}) ${repeat} ${box}`  
  } else if (type === 'linear-gradient' && this.general.degree.size > 0) {  
    return `/* ${comment} */ ${type}(${degree}, ${colors}) ${repeat} ${box}`  
  } else if (type === 'linear-gradient') {  
    return `/* ${comment} */ ${type}(${colors}) ${repeat} ${box}`  
  }  
}
```

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The How 🤔

Turn it into a string



```
margin-top: -60px;  
background-color: #53290b;  
background-repeat: no-repeat;  
background-image: linear-gradient(to right, #c61236, #c61236), linear-  
gradient(115deg, transparent 40%, #daa520 40%), linear-gradient(-115deg, transparent  
40%, #daa520 40%), radial-gradient(ellipse, #daa520 50%, transparent 50%), linear-  
gradient(to top, #53290b 45%, transparent 45%), radial-gradient(ellipse, transparent  
54%, #a0522d 54%, #a0522d 60%, transparent 60%);  
background-size: 12px 50%, 25% 50%, 25% 50%, 105% 80%, 100% 100%, 100% 105%;  
background-position: 50% 0, 33% 0, 68% 0, 50% 130%, 0 0, 0 0;  
border-top-left-radius: 110px;  
border-top-right-radius: 110px;
```


The How 🤔

Bind the style!

```
<div class="canvas"  
  :style="{ background: gradientString }"/>
```



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Demo time!

Let's make the Vue logo together!

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Shapy's Future 🧙

Plans and ideas for Shapy



Gallery:
like/fork/share



Shapy in the
browser



Your ideas?

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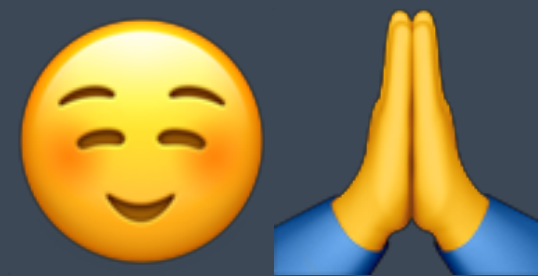
Play with Shapy
shapy.app



Contribute to Shapy
github.com/vicbergquist/shapy

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Thank you!



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