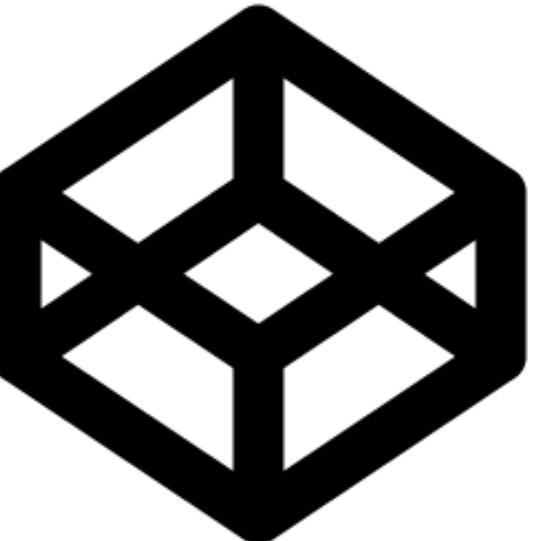


Moving to React at CodePen

Cassidy Williams

@cassidoo

C  DEPEN

For those who don't know

- CodePen is an online code playground
- It was founded in 2012
- People use it to demo and prototype projects, as well as to make art
- There's millions and millions of Pens on the site
- You can get a Pro account to have private Pens, team accounts, different modes, and moooore

Origins

- **2012:** Rails + jQuery + homegrown MVC
- **2016:** React started coming into the picture with Redux
- **Mid 2018:** CodePen decided against Redux and moved to Apollo + GraphQL

chaos <3

https://codepen.io

Picked Pens

VIEW MORE

Emulating :has() to take advantage of :target

What's this How it works CSS Code What-if References No focus

About the pen

What's this?

This pen was quickly created to demonstrate how `:has()` and `:target` can potentially be used in tandem to make changes to various elements that either surround the targeted element or an element that is an ancestor to the `:target`. This also doubles as a proposal for `:target-within`, which could behave as a target counterpart to `:focus-within`.

It is part of a series of pens in which I try to showcase the potential usefulness of `:has()`, which is currently supported by zero browsers as of this pen's publishing.

Pen by seto89

Emulating :has() #5: Taking advantage o... seto89

62 0 6

[CSS Grid] Swiss-style Typography Poster

Henry Desroches PRO

314 1 20

musica viva

matthias hauer werner speth karlheinz stockhausen jacques wildberger igor stravinsky

CODEPENCHALLENGE

CPC-FRUITS-AND-VEGGIES

LRNZDSS

Bunch of Grapes | Interactive Matt

Lorenzo Dossi PRO

243 0 7

404

Clean CSS Glitch

Piotr Galor PRO

375 0 25

Click button to start timer

25 : 00

Vue Pomodoro Timer Scotch Challenge ... Luis Ball PRO

252 0 5

I'm Front-End Engineer

TypeScript CSS Node.js Animation Scene.js

Scene.js examples kinetic typing animat...

daybrush PRO

419 1 37

https://codepen.io

Picked Pens

Emulating :has() to take advantage of :target

About the pen

What's this?

This pen was quickly created to demonstrate how :has() and :target can potentially be used in tandem to make changes to various elements that either surround the targeted element or an element that is an descendant to the :target. This also doubles as a proposal for :target-within, which could behave as a target counterpart to :focus-within.

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https://codepen.io/dashboard?type=view&opts_itemType=pen&opts_filter=all&opts_orderBy=id&opts_orderDirection=0&opts_tag=0&displayType=grid&previewType=iframe&page=2

DASHBOARD

Pens Projects Posts Collections Deleted

SEARCH View Filter TAG

Search... Search All

GRID LIST SORT DIRECTION Date Created PEN PREVIEWS

Sort Direction: Date Created

Live Preview

YOUR Dashboard Profile Pinned Items Activity EXPLORE Picked Popular Following Topics GROW Jobs Challenges Meetups Newsletter Blog Docs & Support

CodePen Challenge: Tribute to Team CodePen

4,055 views 4 comments 155 likes

React Class Component Example

0 views 0 comments 0 likes

Circle Buddy

5,014 views 5 comments 136 likes

vbegQm

31 views 0 comments 0 likes

heading to our leader

1,332 views 0 comments 23 likes

exNedm

31 views 0 comments 0 likes

The screenshot shows the CodePen dashboard with a dark theme. On the left, there's a sidebar with navigation links like 'Dashboard', 'Profile', 'Pinned Items', etc. The main area has a green header with tabs for 'Pens' (selected), 'Projects', 'Posts', 'Collections', and 'Deleted'. Below the header are search and filter controls. The main content area displays a grid of project cards. Each card includes the project title, view count, comment count, and like count. Some cards show preview images or snippets of the code.

https://codepen.io/rachsmith/   Search CodePen... 

CREATE

-  **Pen**
from template ▾
-  **Project**
-  **Post**
-  **Collection**

YOUR

- Dashboard**
- Profile**
- Pinned Items**
- Activity**

EXPLORE

- Picked**
- Popular**
- Following**
- Topics**

GROW

- Jobs**
- Challenges**

Meetups
Newsletter
Blog
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Rachel Smith PRO

@rachsmith FOLLOWS YOU

4,221 Followers 530 Following [+Follow](#)

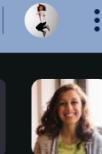
 Venice, California

pixel pusher and JavaScript wrangler at CodePen

[Pens](#) [Projects](#) [Posts](#) [Collections](#)

[Showcase](#) Popular All Pens Templates Forked Loved Tags



https://codepen.io/topics/  

CODEPEN

CREATE

- Pen from template
- Project
- Post
- Collection

YOUR

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- Activity

EXPLORE

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GROW

- Jobs
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Newsletter

Blog

Docs & Support

Search CodePen...

Explore Topics

Templates, examples and resources for common libraries, frameworks and UI patterns.

Suggest A Topic

All Topics Frameworks Libraries UI Patterns

**React**

A JavaScript library for building user interfaces

**Vue**

The Progressive JavaScript Framework

**GSAP**

Ultra high-performance, professional-grade animation for the modern web

**Tailwind CSS**

A utility-first CSS framework for rapidly building custom user interfaces

**Sass**

A mature CSS preprocessor that brings features like variables, nesting, loops, mixins, extends, and math, among other features.

**anime.js**

A lightweight JavaScript animation library with a simple, yet powerful API

**Splitting.js**

CSS Vars for split words & chars! (items, grids, images, too!)

**Accordions**

Closed. Closed. Open. Closed.

**Menu Icons**

The ubiquitous hamburger.

**Grids**

The layout helper of choice.

**Charts & Graphs**

Destiny awaits.

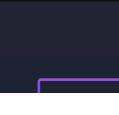
**Tabs**

Peek-a-boo!

**Star Ratings**

**Buttons**

**Breadcrumbs**

**Dialogs**

https://codepen.io/topics/   Search CodePen... 

CREATE

-  Pen
from template ▾
-  Project
-  Post
-  Collection

YOUR

- [Dashboard](#)
- [Profile](#)
- [Pinned Items](#)
- [Activity](#)

EXPLORE

- [Picked](#)
- [Popular](#)
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- [Topics](#)

GROW

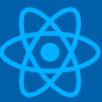
- [Jobs](#)
- [Challenges](#)
- [Meetups](#)
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https://codepen.io/topics/   Search CodePen... 

CREATE

 Pen
from template ▾

 Project

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Popular

Following

Topics

GROW

Jobs

Challenges

Meetups

Newsletter

Blog

Docs & Support

Search Bar

 Pens  Projects  Posts  Collections

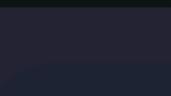
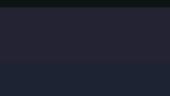
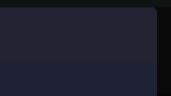
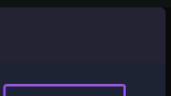
POPULAR SEARCHES

Vue Projects, React Projects, SVG Animation Pens, Flexbox Pens, Canvas Posts, CSS Posts

EXPLORE TOPICS

 React  Vue  Tailwind  Sass  GSAP

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 React A JavaScript library for building user interfaces	 Vue The Progressive JavaScript Framework	 GSAP Ultra high-performance, professional-grade animation for the modern web	 Tailwind CSS A utility-first CSS framework for rapidly building custom user interfaces
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CREATE

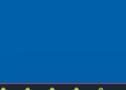
Pen from template ▾ Project Post Collection

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 Dialogs		

← → ⌂ https://codepen.io/cassidoo/pen/pYPoRw?editors=1100

CodePen Challenge: Tribute to Team CodePen ↎
A PEN BY Cassidy Williams PRO

HTML (Haml)

```
1 .container
2   .tim
3     .head
4     .face
5     .hair
6     .top
7   %p tim
8   .chris
9     .head
10    .face
11    hair
```

CSS (SCSS)

```
1
2
3 body {
4   background: lightblue;
5 }
6
7 .container {
8   position: absolute;
9   top: 50%;
10  left: 50%;
11  transform: translate(-50% -50%);
```

tim chris alex marie rach klare cassidy shaw

Console Assets Comments ⌂ Last saved 3 months ago ★ ⌂ Delete Collections Embed Export Share

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← → ⌂ https://codepen.io/zerospree/project/editor/XLkwKj

CSSans Pro - The colourful CSS font
A PROJECT BY Codrin Pavel PRO

Read Only

index.njk _home.njk cssans.scss

PROJECT ROOT

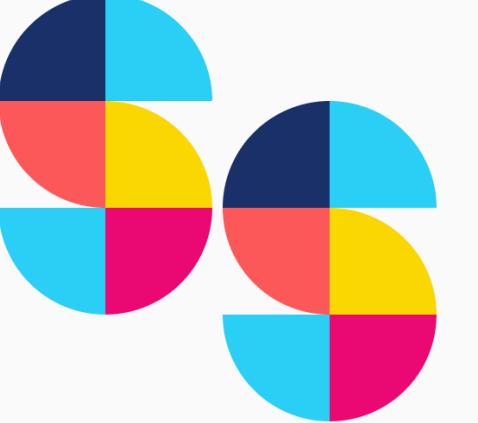
- components
- js
- sass
 - presentation
 - _common.scss
 - _lowercase.scss
 - _numbers.scss
 - _symbols.scss
 - _uppercase.scss
 - * cssans.scss
- cssans.processed.css
- svg
 - icon-codepen-white.svg
 - icon-codepen.svg
 - icon-edit-on-codepen.svg
 - icon-instagram-white.svg
 - icon-instagram.svg
 - icon-twitter-white.svg
 - icon-twitter.svg
- templates
 - _home.njk
 - * index.njk
- index.html

This file is read-only.

```
1 /*!
2 * CSSans Pro v1.0.0 (https://cssans.pro/)
3 * Copyright 2019 Codrin Pavel
4 * Copyright 2019 Izabela Andronache
5 * Licensed under MIT (https://github.com/ZeroSpree/CSSans.Pro/blob/master/LICENSE)
6 */
7
8 @import
9   "common",
10  "lowercase",
11  "uppercase",
12  "numbers",
13  "symbols"
```

PREVIEW: index.html

GLYPH



UPPERCASE



LOWERCASE



Export

← → ⌂ https://codepen.io/zerospree/project/editor/XLkwKj

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A PROJECT BY Codrin Pavel PRO

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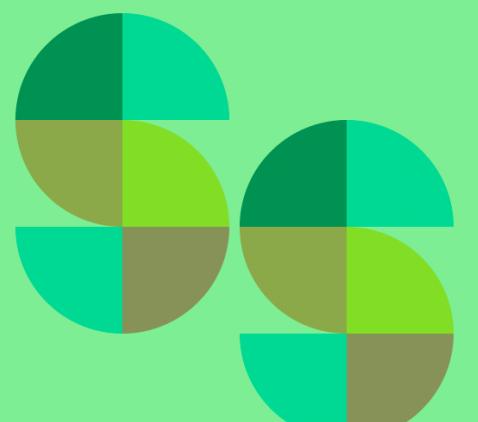
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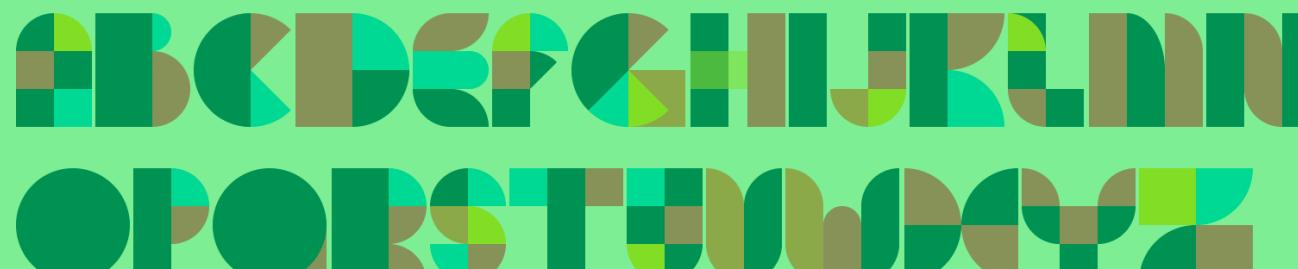
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PREVIEW: index.html

GLYPH



UPPERCASE



LOWERCASE



Export

It's not all bad!

We've learned a ton

- Redux was a good intro for the team into React
- Redux also taught us what we don't want to do
- Apollo + GraphQL is **really** fun to write

We've fully shipped some features in this new stack

- CodePen Topics
- Responsive Pen Editor
- Popups/Modals/Drawers across the site

Our Apollo + GraphQL setup

Our Apollo + GraphQL setup

- We have a server state and a local client state
- The front-end doesn't care where the state is
- We can make things particularly modular with hooks

```
const SESSION_USER = gql`  
  query CreateSessionUser {  
    sessionUser {  
      id  
      anon  
    }  
  }  
`;
```

```
const SESSION_USER = gql`  
query CreateSessionUser {  
  sessionUser {  
    id  
    anon  
    pro  
  }  
}  
`;
```

```
let sessionUser = useQuery(SESSION_USER);

if (sessionUser.pro) {
  return false;
}

return (
  <a
    href="/pro"
    style={{ display: 'block' }}
    onClick={!data.sessionUser.anon ? freeModalUpsell : undefined}
    id="go-pro-sidebar"
  >
  CodePen <span className="badge badge-pro">PRO</span>
  </a>
);
```

Our testing setup

Our testing setup

- We use Jest for unit testing
- We use Cypress for integration testing

```
describe('capitalize', () => {
  it('capitalizes a string', () => {
    expect(capitalize('pen')).toEqual('Pen');
  });
  it('capitalizes an all caps string', () => {
    expect(capitalize('PROJECT')).toEqual('Project');
  });
});
```

```
describe('About page', function() {
  it('Renders the page', function() {
    cy.visit('/about');

    cy.get('address.person img').then(imgs => {
      const MEMBERS_OF_CODEPEN = 8;
      expect(imgs.length).equals(MEMBERS_OF_CODEPEN);
    });
  });
});
```

What's next?

Things we're
(slowly) working
on

Things we're (slowly) working on

- Routing 😊
- Moving Projects + Dashboard to Apollo-land 😊
- Speeding up our local testing env 😊

Things we're
(quickly) working
on

Things we're (quickly) working on

- Exporting features
- A more social experience
- Very fun secrets 😊

How you can help

- Keep on coding
- Recommend Topics for knowledge-sharing
- Send us feature requests so we can prioritize
- Get CodePen Pro

Thank you!

@cassidoo