



ENTERPRISE SOFTWARE DEVELOPMENT



Next.js & Shadcn UI: The Future of Modern Websites

Brisbane User Group June 2024



Jack Pettit

SSW Software Engineer

About me:

Motorbike rider 🏍️

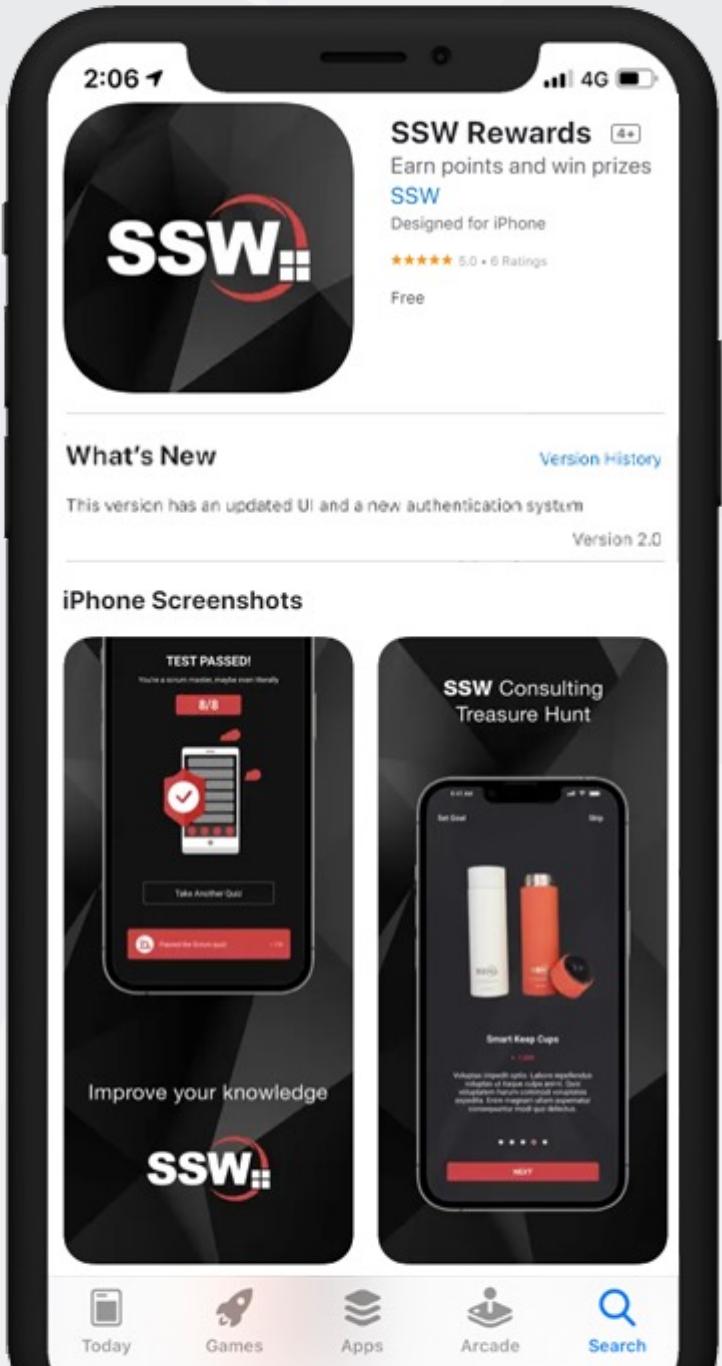
Gamer ⚙️

Follow me:

Twitter: @SSWJackPettit

GitHub: @JackDevAU

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2. Scan SSW codes at talks and events
3. Earn **SSW Points**
claim rewards, and win prizes



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Agenda

1. JavaScript Ecosystem

2. What is Next.js & Shadcn/ui

3. Setting Up a Next.js Project

4. Building Components with Shadcn/ui

5. Forms

6. Further Resources

Let's talk about the JavaScript Ecosystem



Server-Side
JavaScript - Node.js



Package
Management – npm,
yarn, pnpm



Build Tools –
Webpack, vite



State Management –
Redux, MobX



Testing Frameworks
– Jest, testing
framework



Styling Solutions –
Tailwindcss, CSS-in-JS

In comes React



Developed by
Facebook in 2013.



Component-based
architecture



Revolutionized
building UI



Virtual DOM



Strong community
support

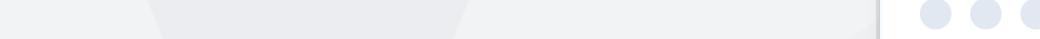
JavaScript XML (JSX)



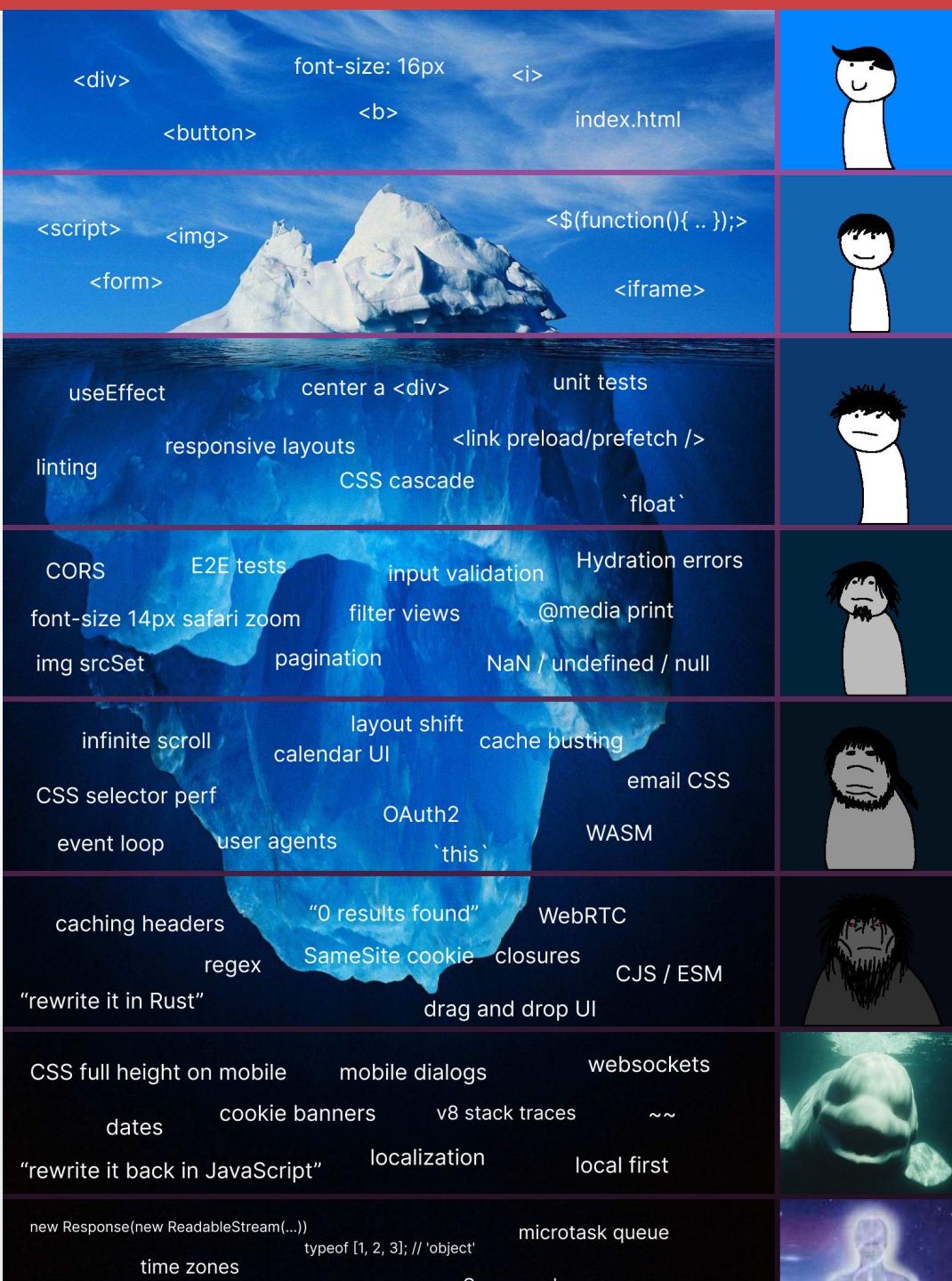
```
1 export default function Page() {  
2   return <h1>Hello, World!</h1>  
3 }
```

JSX looks similar to HTML

Can include JavaScript expressions
and logic



```
1 export default function Page() {  
2   const name = 'Jack';  
3   return <h1>Hello, {name}!</h1>  
4 }
```



“Frontend is hard”

Lee Robinson
VP of Product @Vercel

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Frameworks

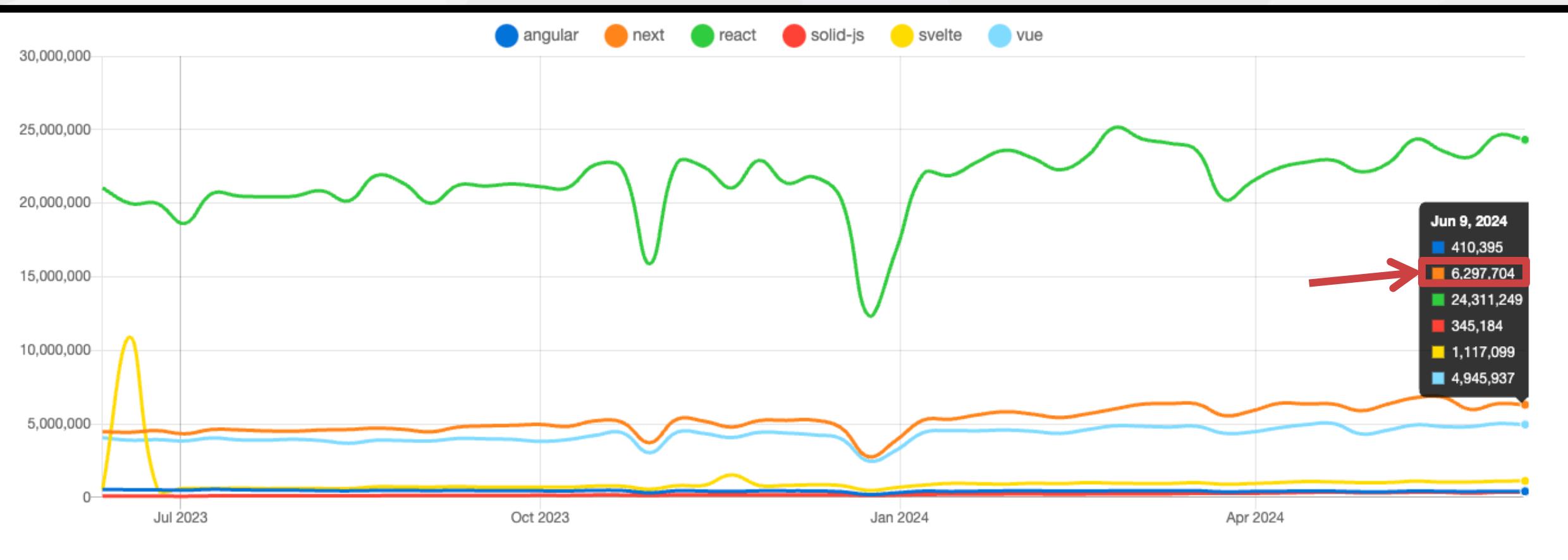
- Next.js
- Angular
- Vue
- Svelte
- Solid
- And many more...

Is React still used?



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2023-2024 Weekly Downloads

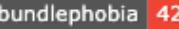


<https://npmtrends.com/angular-vs-next-vs-react-vs-solid-js-vs-svelte-vs-vue>

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GitHub Stars

Stats

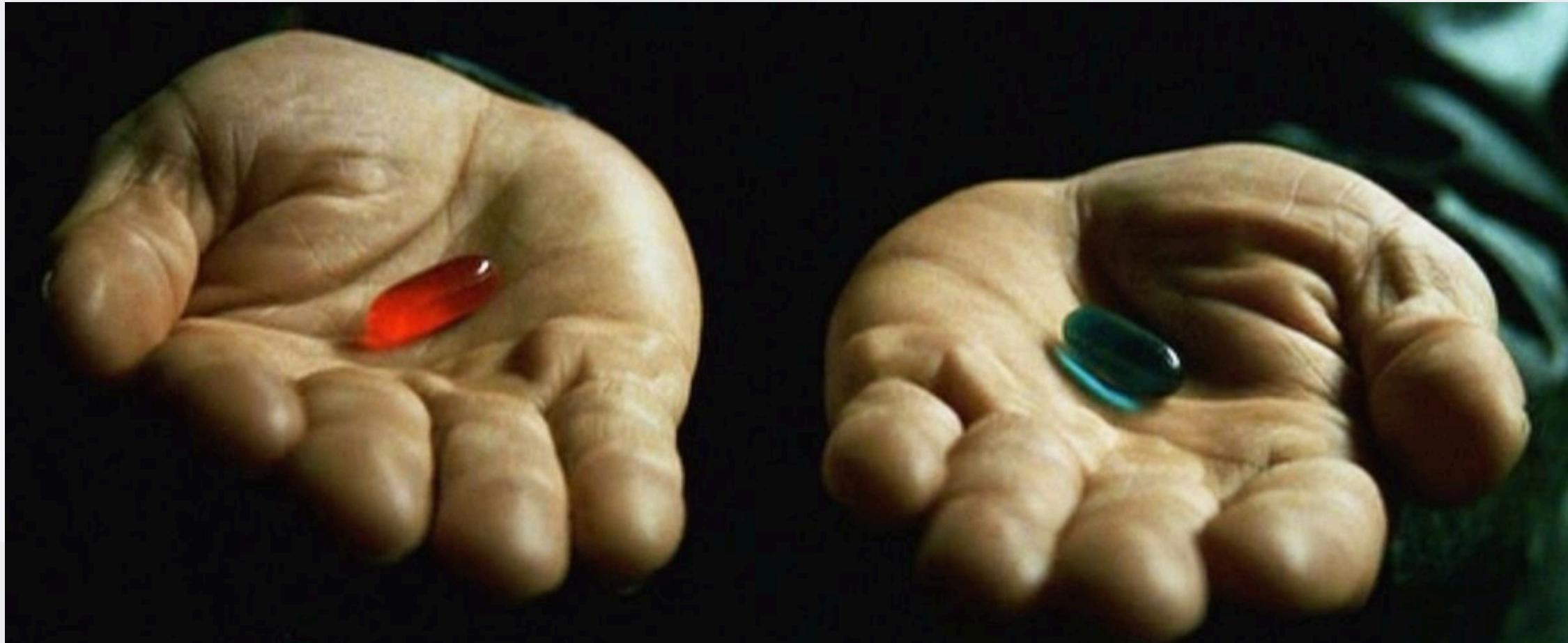
| | | | Stars | Issues | Version | Updated ⓘ | Created ⓘ | Size |
|---|----------|---|---------|--------|---------|--------------|--------------|---|
|  | angular |    | 58,921 | 464 | 1.8.3 | 2 years ago | 12 years ago |  429 |
|  | next |    | 122,258 | 3,285 | 14.2.4 | 5 days ago | 13 years ago |  429 |
|  | react |    | 224,240 | 914 | 18.3.1 | 2 months ago | 13 years ago |  2.5 KB |
|  | solid-js |    | 31,515 | 96 | 1.8.17 | 2 months ago | 6 years ago |  8.1 KB |
|  | svelte |    | 77,140 | 873 | 4.2.18 | 11 days ago | 8 years ago |  2.7 KB |
|  | vue |    | 45,362 | 950 | 3.4.29 | 3 days ago | 11 years ago |  40.9 KB |

<https://npmtrends.com/angular-vs-next-vs-react-vs-solidjs-vs-svelte-vs-vue>

It's popular and it's loved!

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Where Next.js sits



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What is Next.js?



A large, bold, black sans-serif font displays the word "NEXT.JS". A thick, black diagonal line starts from the bottom-left, passes through the "E" and "X", and ends at the top-right, effectively crossing out the word.

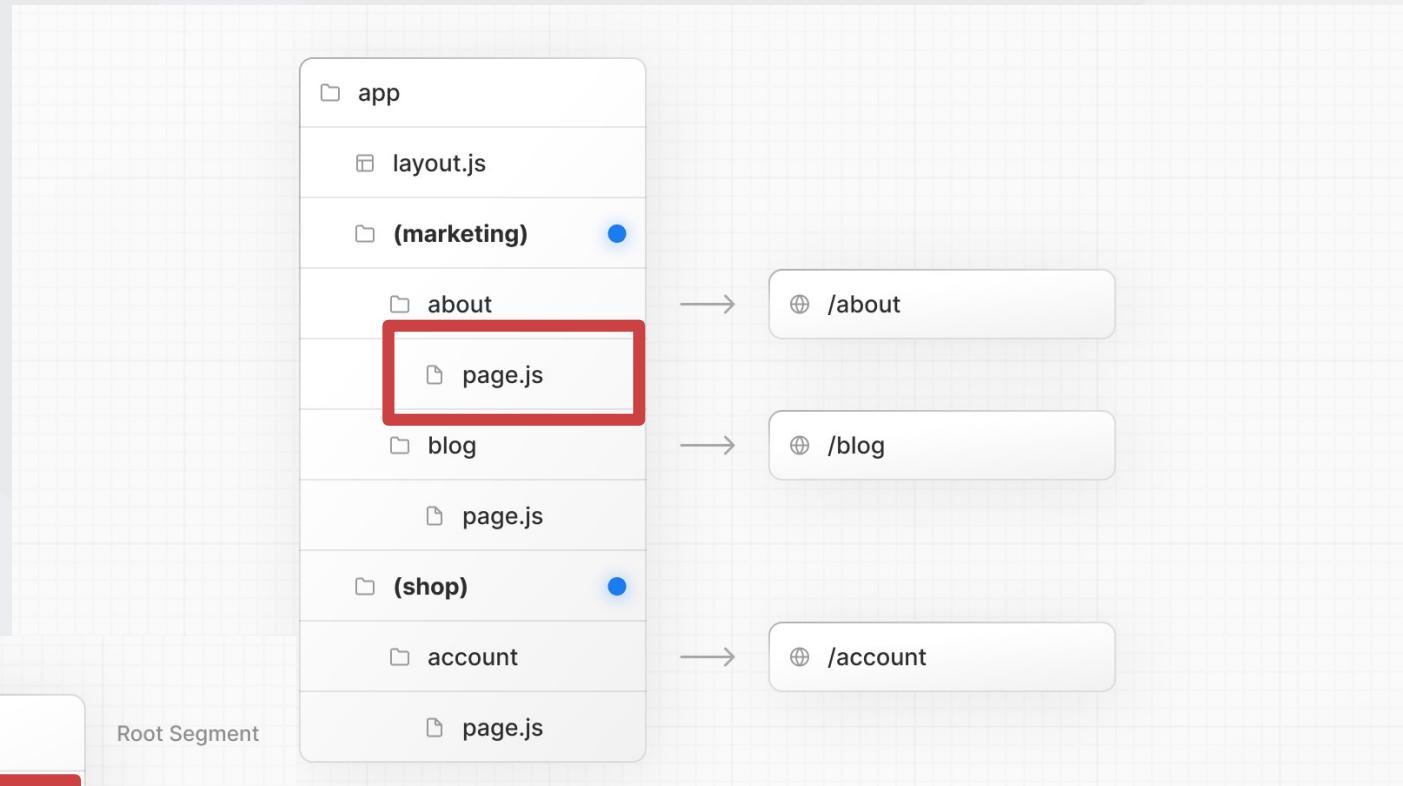
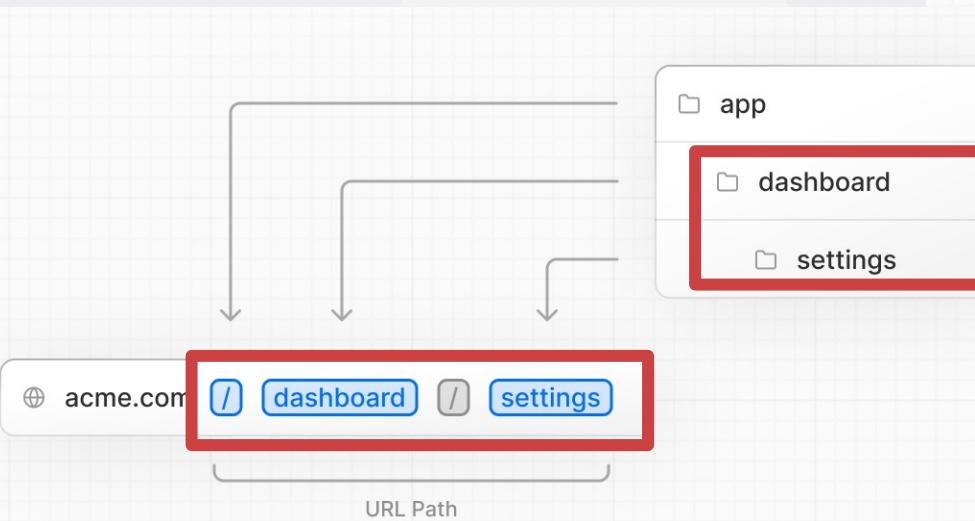
[This Photo](#) by Unknown Author is licensed under [CC BY-SA-NC](#)

The React Framework

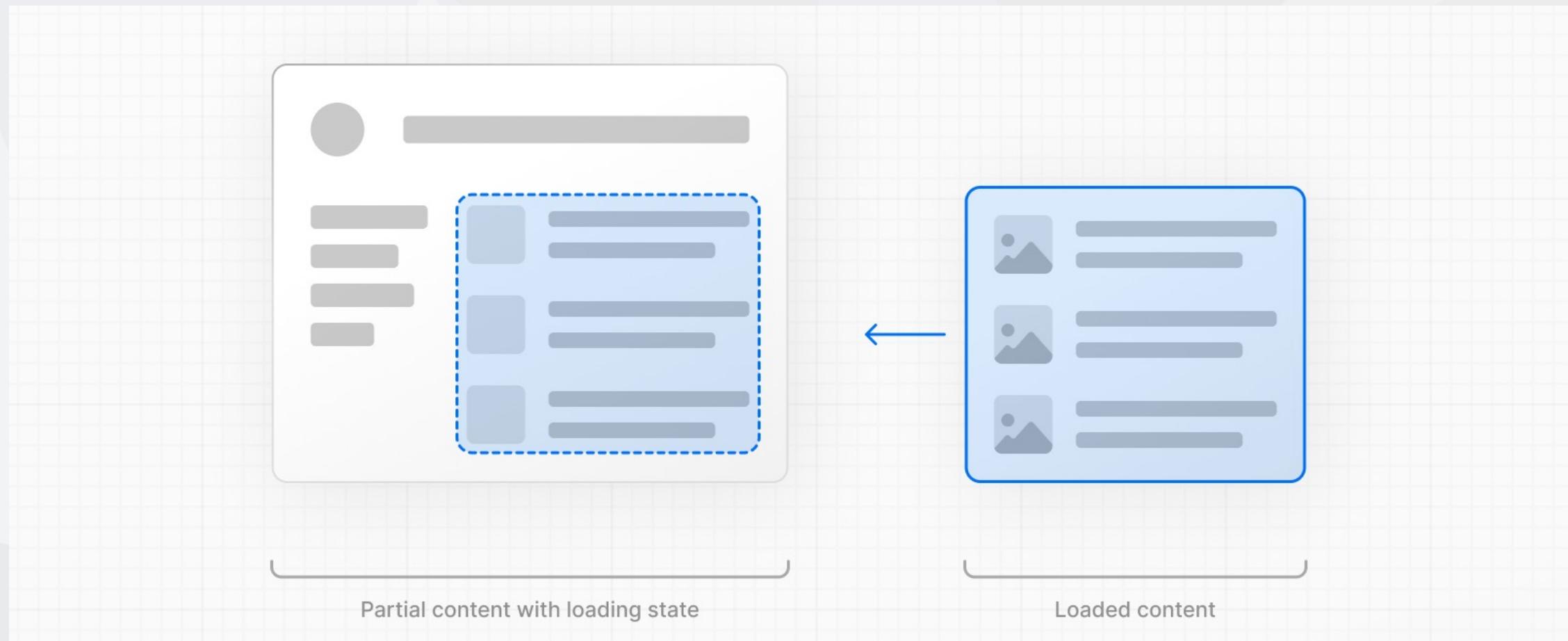


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Routes



Static/Dynamic Content



Optimizations



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Backend



Serverless



Express Api

That's a lot of stuff



Recap

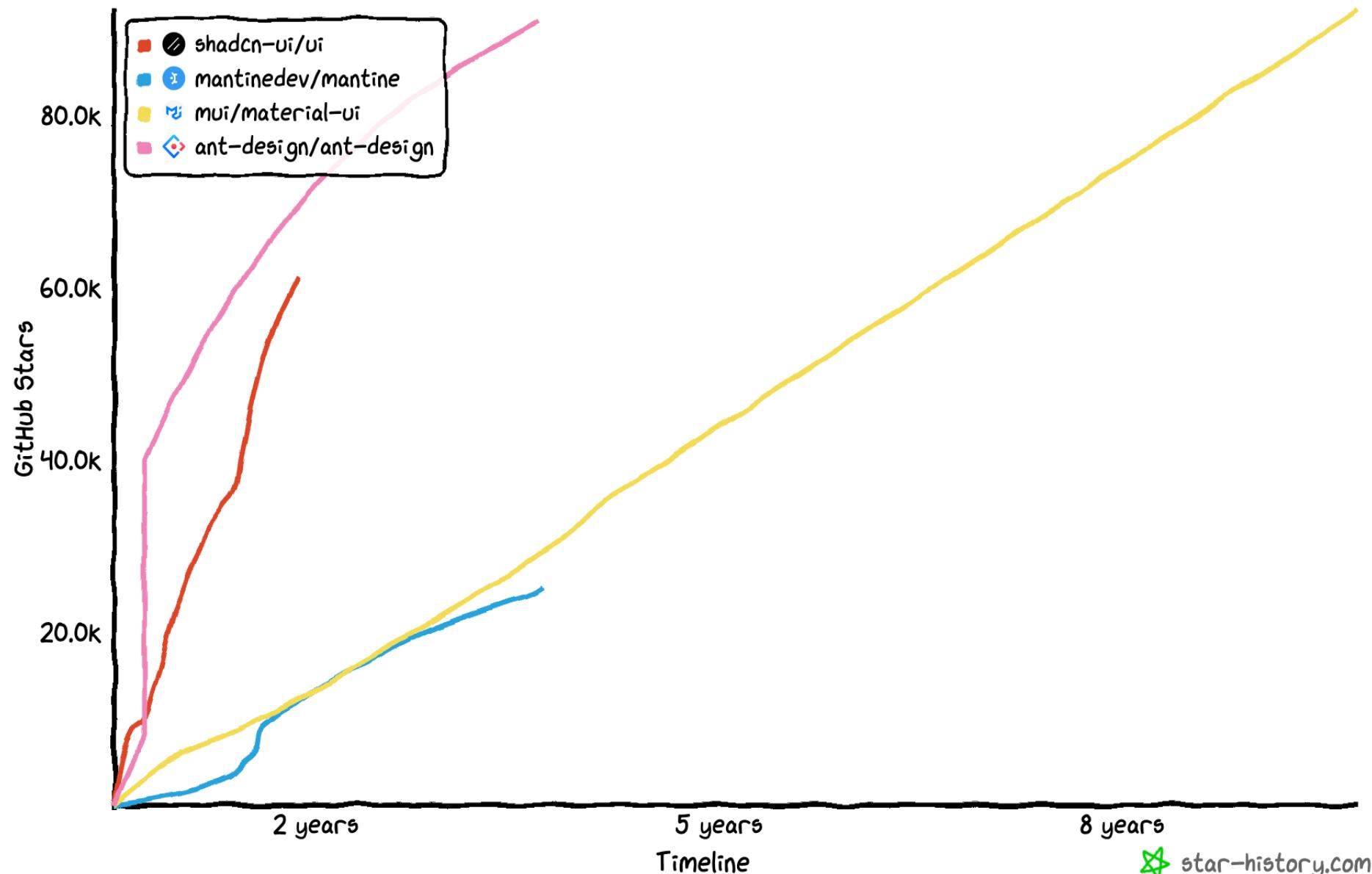
- Full Stack Framework for React (/app & /api)
- Provides a robust routing system (Folder based)
- Supports both static and dynamic content generation
- Includes built-in optimizations for assets such as images

What about UI libraries?

Popular ones that are highly rated

- Shadcn/ui
- MUI
- Ant Design
- MantineUI
- 1000+ more

Star History



Dashboard

Overview Analytics Reports Notifications

Total Revenue

\$45,231.89

+20.1% from last month

\$

Subscriptions

+2350

+180.1% from last month

👤

Sales

+12,234

+19% from last month

Jan 20, 2023 - Feb 09, 2023

Download

What is Shadcn/ui?

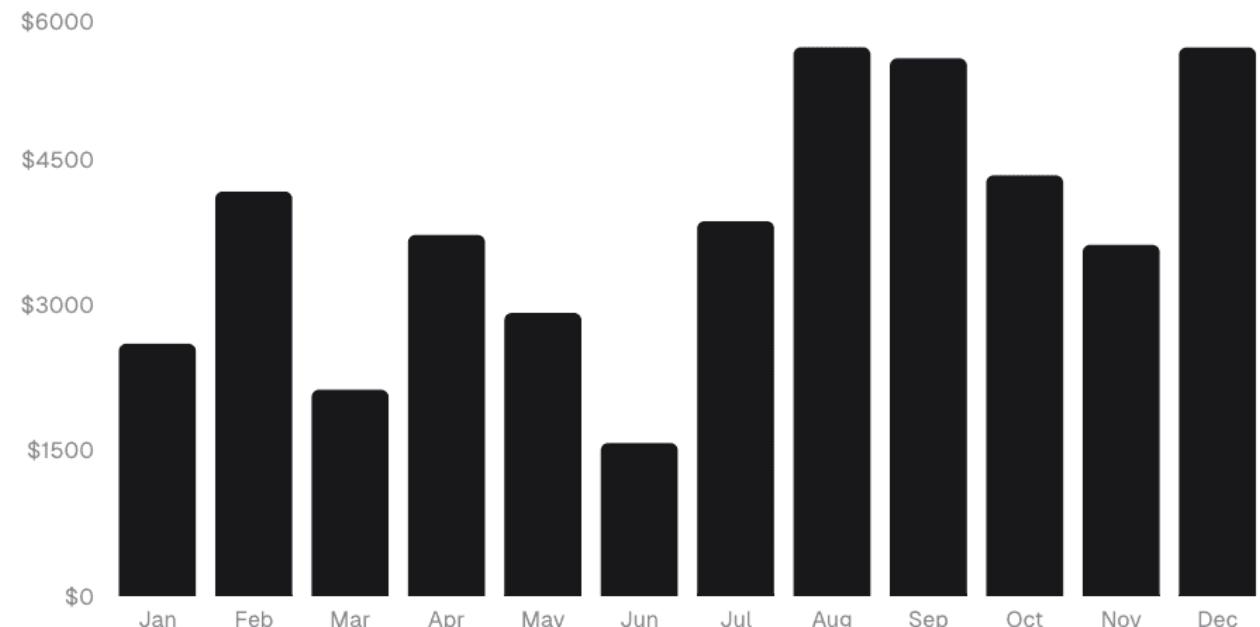
Active Now

+573

+201 since last hour

▴

Overview



Recent Sales

You made 265 sales this month.



Olivia Martin

olivia.martin@email.com

+\$1,999.00



Jackson Lee

jackson.lee@email.com

+\$39.00



Isabella Nguyen

isabella.nguyen@email.com

+\$299.00



William Kim

will@email.com

+\$99.00



Sofia Davis

sofia.davis@email.com

+\$39.00

NOT a component library

Beautifully designed components that you can copy and paste into your apps

- Accessible
- Customizable
- Open Source

The collage consists of six screenshots from a mobile application, each showcasing a different UI component:

- Subscriptions:** A bar chart showing growth in subscriptions.
- Calendar:** A monthly calendar for June 2023, with specific dates highlighted.
- Chat:** A messaging interface where a user asks for help with account trouble, and another user responds.
- Exercise Minutes:** A graph showing exercise minutes over time.
- Payments:** A section for managing payments, featuring a search bar and filter options.
- Create an account:** A registration form for creating a new account via email or social media.

41+ Components

- Accordion
- Alert
- Dialog
- Aspect Ratio
- Avatar
- And many more

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Subscriptions
+2350
+180.1% from last month

Sofia Davis
m@example.com

Hi, how can I help you today?

Hey, I'm having trouble with my account.

What seems to be the problem?

I can't log in.

Type your message...

Create an account

Enter your email below to create your account

Github Google

OR CONTINUE WITH

Email
m@example.com

June 2023

| Su | Mo | Tu | We | Th | Fr | Sa |
|----|----|----|----|----|----|----|
| 28 | 29 | 30 | 31 | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 1 |

Exercise Minutes

Your exercise minutes are ahead of where you were this time last year.

Payments

Manage your payments.

Filter emails...

| <input type="checkbox"/> Status | Email |
|----------------------------------|-----------------|
| <input type="checkbox"/> Success | ken99@yahoo.com |

41+ Components

- Only take what you need
- Use Tailwindcss ⚡ to customize it
- You own the code

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```
1 npx shadcn-ui@latest add button
```



```
1 import { Button } from "@components/ui/button"
2
3 export function ButtonDemo() {
4   return <Button>Button</Button>
5 }
```



Button

Colours & Blocks

Add colors. Make it yours.

Hand-picked themes that you can copy and paste into your apps.



Copy code

Total Revenue

\$15,231.89

+20.1% from last month



Subscriptions

+2350

+180.1% from last month



June 2023

| Su | Mo | Tu | We | Th | Fr | Sa |
|----|----|----|----|----|----|----|
| 28 | 29 | 30 | 31 | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 1 |

Team Members

Invite your team members to collaborate.



Sofia Davis
m@example.com



Move Goal

Set your daily activity goal.

350

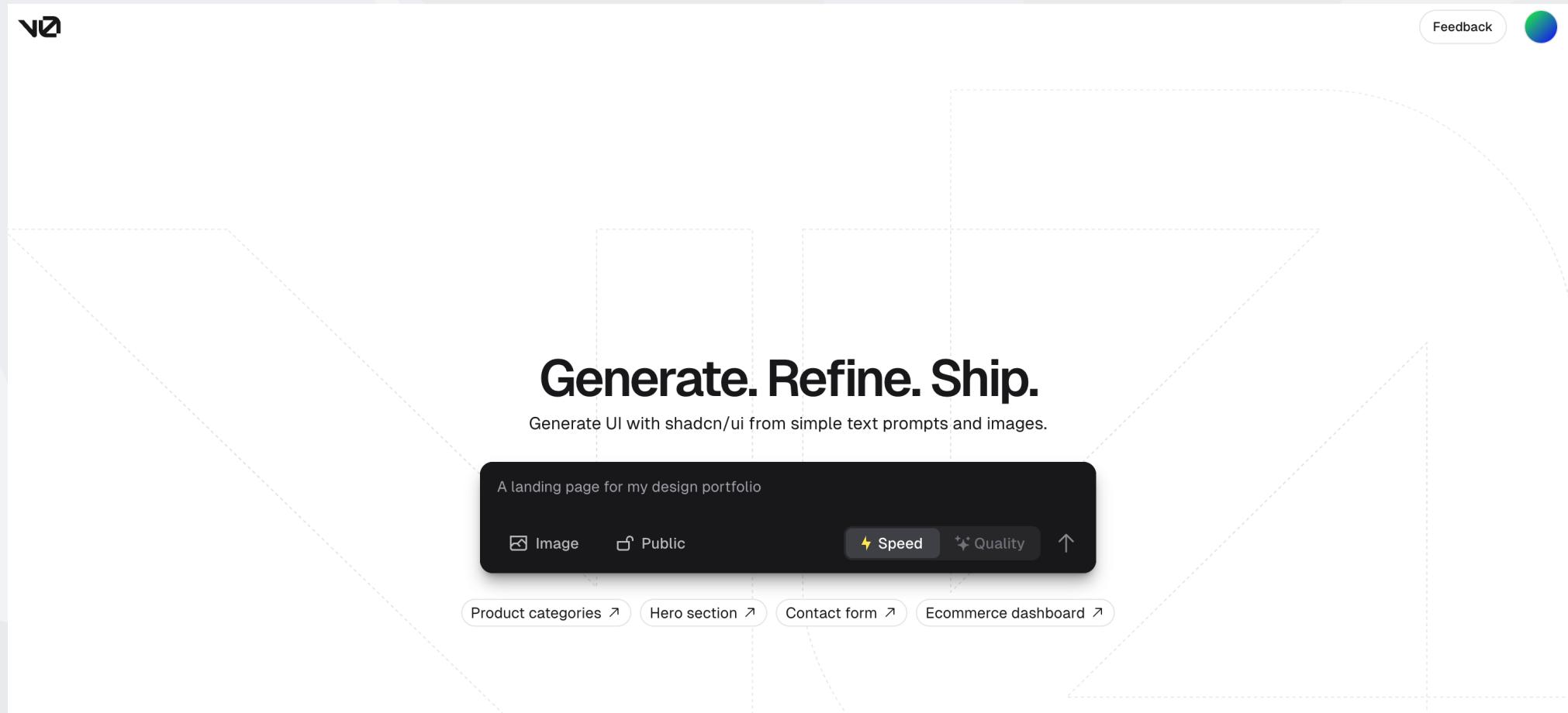
CALORIES/DAY



Set Goal

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v0 Out of the box



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Recap

- 41+ Pre-built Components
- Full Customization
- Accessibility + Responsiveness built in
- v0.dev
- Tailwindcss + React

Agenda

1. JavaScript Ecosystem

2. What is Next.js + Shadcn/ui?

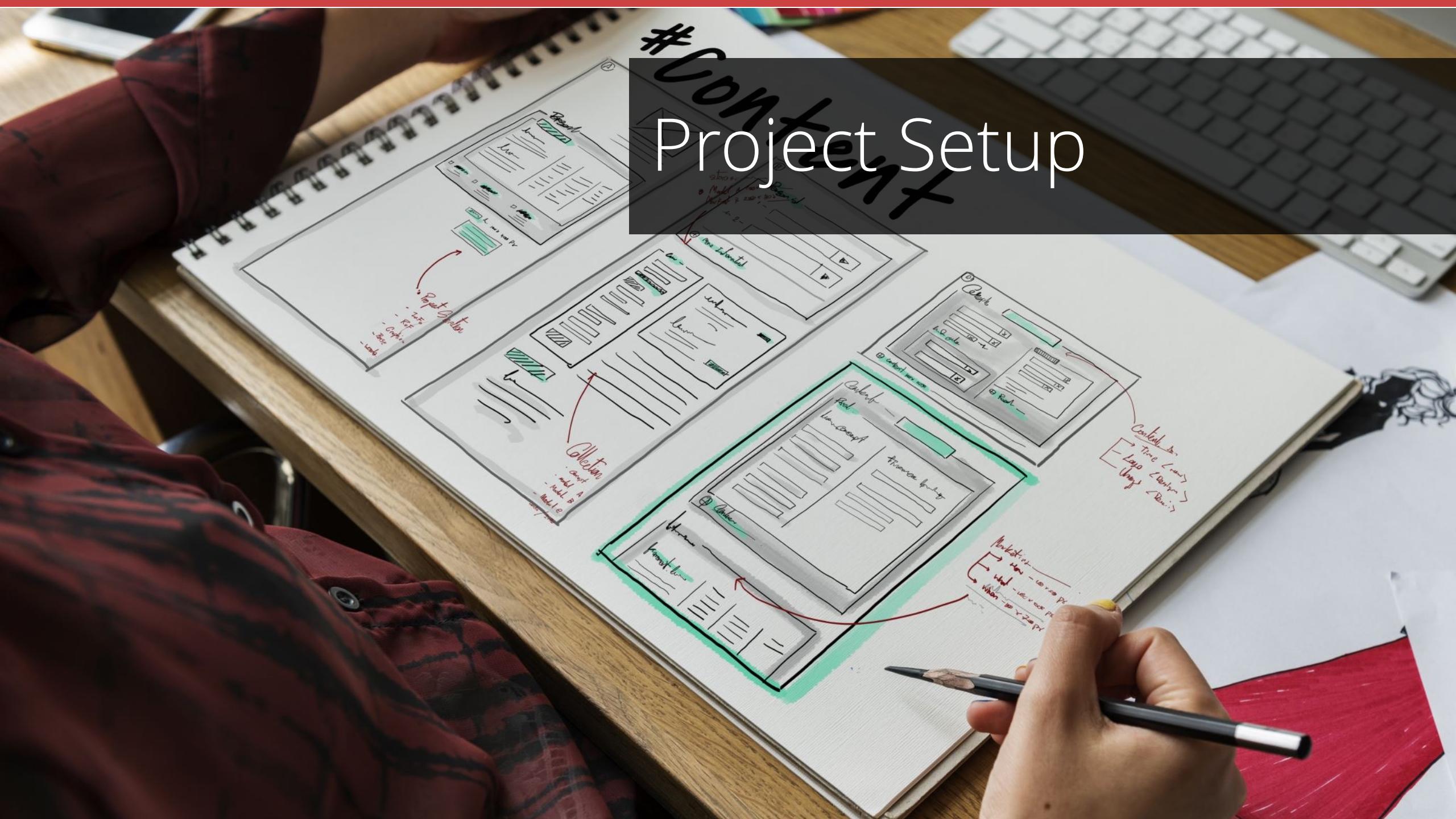
3. Setting Up a Next.js Project

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Project Setup



Demo

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File Conventions

Core

- Page.js | .jsx | .tsx
- Layout.js
- Route.js

Useful

- Error.js
- Loading.js
- Not-found.js
- Middleware.js

Might Never use

- Default.js
- Instrumentation.js
- Template.js

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Buttons really?!

- Default variants

Default

Secondary

Destructive

Outline

Ghost

Link

Demo

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Custom Shad Button

- Go Crazy, It's your button!



<https://github.com/jakobhoeg/enhanced-button>

Blocks

The screenshot shows a dashboard interface titled "Your Orders". On the left, there's a sidebar with icons for Home, Cart, Product, User, and Order. The main area has a breadcrumb navigation: Dashboard > Orders > Recent Orders. A search bar and a "Track Order" button are also present.

Your Orders
Introducing Our Dynamic Orders Dashboard for Seamless Management and Insightful Analysis.
[Create New Order](#)

This Week
\$1,329
+25% from last week

This Month
\$5,329
+10% from last month

Order Oe31b7OH
Date: November 23, 2023
[Track Order](#)

| Order Details | |
|-------------------|----------|
| Glimmer Lamps x 2 | \$250.00 |
| Aqua Filters x 1 | \$49.00 |
| Subtotal | \$299.00 |
| Shipping | \$5.00 |

Week **Month** **Year**

[Filter](#) [Export](#)

Orders

<https://ui.shadcn.com/blocks>

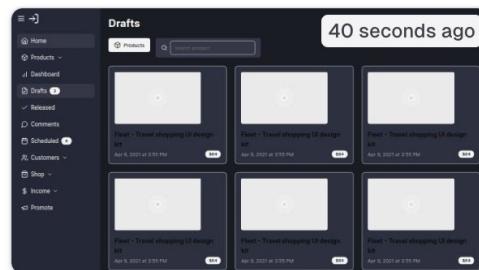
Demo

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v0.dev

Explore

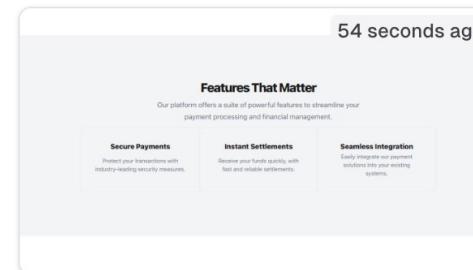
New Generations Featured



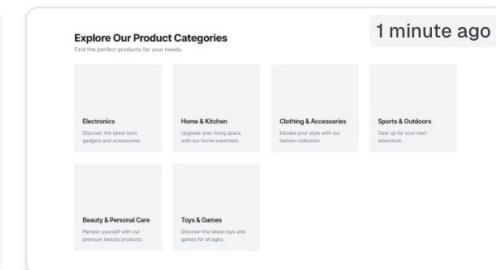
create this page in react wi...



navbar agradable



create a website like pay...



A list of product categories...

<https://v0.dev/>

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Demo

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Forms

- Are Tricky
- You will always build one
- Somehow always become complex

Shadcn/ui has FORMS!

- Still gets complex
- Quite a lot of code
- But less than normal!!
- Full control

Username

This is your public display name.

Submit

<https://ui.shadcn.com/docs/components/form>

Demo

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Auto Form

- Community made
- Half the amount of code
- Limited Control

Username *

This is your public display name.

Submit

<https://github.com/vantezzen/auto-form>

Demo

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Recap

- Forms are hard
- Use a battle-hardened form library (react-hook-form, formik, etc)
- Shadcn/ui has a great starting point
- Auto Form is amazing for simple forms

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Resources

Shadcn/ui Docs

<https://ui.shadcn.com/docs>

V0.dev

<https://v0.dev/>

Shadcn/ui Blocks

<https://ui.shadcn.com/blocks>

Shadcn/ui Themes

<https://ui.shadcn.com/themes>

Awesome Shadcn/ui

<https://github.com/birobirobiro/awesome-shadcn-ui>

Next.js learn

<https://nextjs.org/learn>

Rules to Better Next.js

<https://www.ssw.com.au/rules/rules-to-better-nextjs/>

Summary

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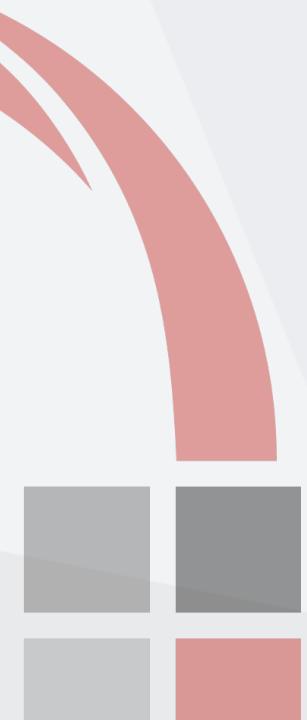
5. Forms

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Find this presentation on GitHub!



github.com/sswconsulting/presentations



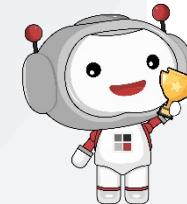
Got feedback for today's session?

Earn SSW 500 points★
by filling out our survey.



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Thank you!



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