

Take Advantage of Conway's Law with React

Or: Teams VS Technology....fight!

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How Do Committees Invent?

Melvin E. Conway, 1968

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“Don’t ship the org chart.”

Steven Sinofsky, ????

“Remember Sinofsky's "don't ship the org chart"? It is a lie. You cannot avoid it. You always ship the org chart. So the real question is, what is the org going to look like so that we ship something good-looking?”

Hacker News

An “Amazon Engineer”, 2011

What does this mean?

- We build teams
- Those teams build software
- The software's structure resembles our teams' structure
- This is bad!

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-
- Except when it's good?

Consider these ideas

- Separation of Concerns
- Write Everything Twice? Don't Repeat Yourself.
- Not Invented Here

Examples

Company A (departments)

- UI Design is a single group at the company
- All product/feature teams share the same pool of designers
- UI Designers work closely with each other, but not colocated with other engineers

Company B (matrix)

- UI Designers are embedded in engineering teams
- A product/feature team might have one or two designers dedicated to their projects
- UI Designers work closely with other engineers, but not with other Designers

Code reuse will help

- Person A wrote something that works
- Person B needs to reuse some of that work
- Person A or B can extract it to import in their component
- Person C will see the benefit too

CSS examples 1/3

- External CSS files
- Your component's style is defined in CSS files deployed separately
 - CSS changes can happen out of band with application deploys
 - Application deploys can happen with no change in CSS style (don't update classes!)
 - But...nothing is optional

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CSS examples 2/3

- CSS loaders (ex: Webpack)
- Your component has an imported style elsewhere in your application
 - CSS changes are separated from component changes, but still deployed together
 - Your CSS can be global or local, depending on need
 - But...bad dependency management leaves the risk of orphan code

JS

```
import styles from './app.css'

let element = `
  <div class="${styles.element}">
    <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit. Consequatur laudantium
  </div>
`

document.write(element);
```

CSS examples 3/3

- Styled Components <https://www.styled-components.com/>
- Your component has an inline style that is scoped only to the component
 - Changes are less likely to affect other components
 - Styles are colocated to the component using them
 - Removing the component also cleans up the component's CSS
 - But...your component is less readable

```
1  import styled from 'styled-components';  
2  
3  const Text = styled.div`  
4    color: white,  
5    background: black  
6  `;  
7  
8  <Text>Hello CSS-in-JS</Text>
```


Conclusions

- There is no Right Answer™
- Sorry.

Thank you!

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