



Enhancing Frontend

Tech Workshop #2

Feb 16, 2026

From here on...

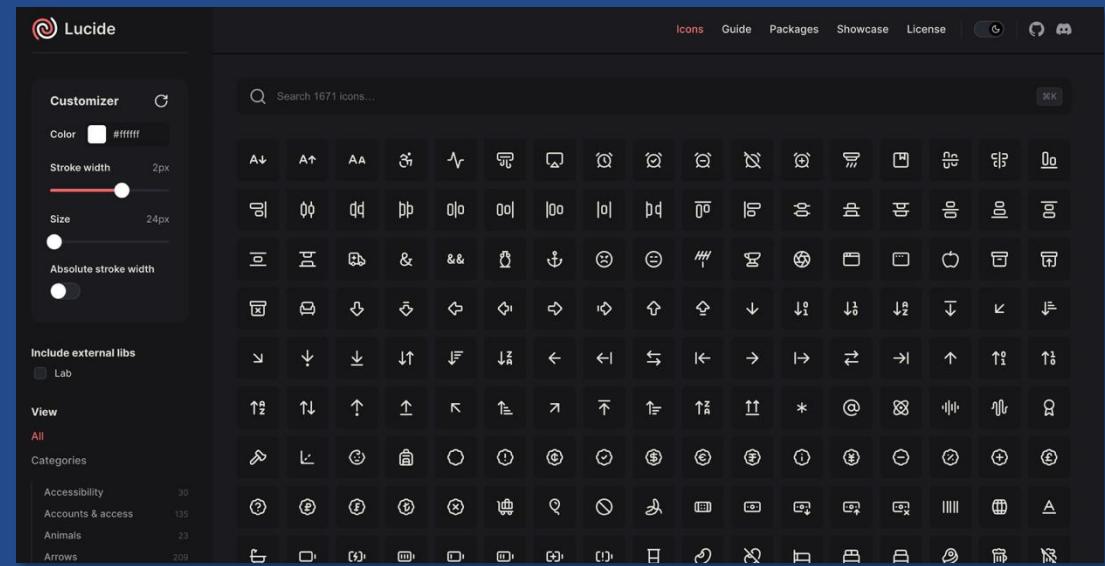


Agenda

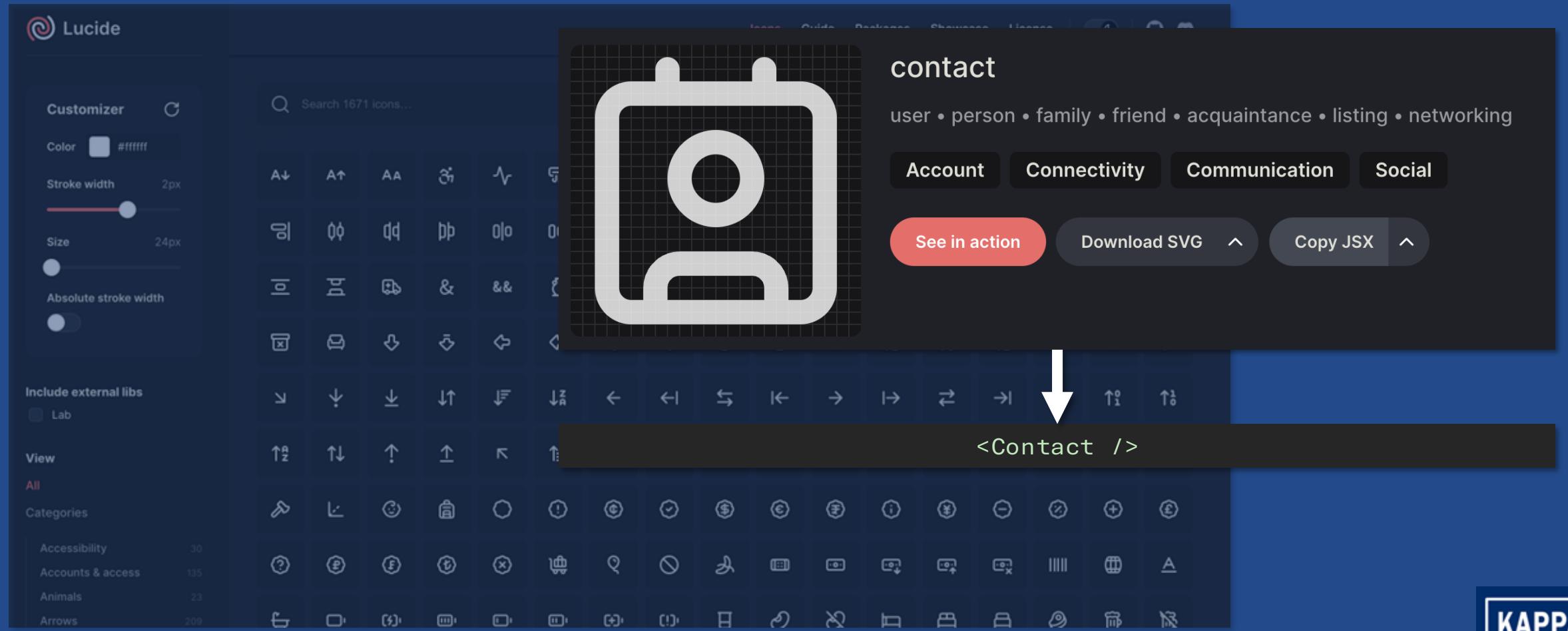
1. Questions from last workshop
2. Lucide
3. Shadcn/ui
 - Buttons, dialogs, input, carousel
4. Images
5. Responsivity

Lucide

- Open-source icon library
- Based on Feather Icons
- Designed for:
 - Simplicity
 - Consistency
 - Customization
- Built for modern frameworks like Next.js
 - Shadcn/ui uses these icons

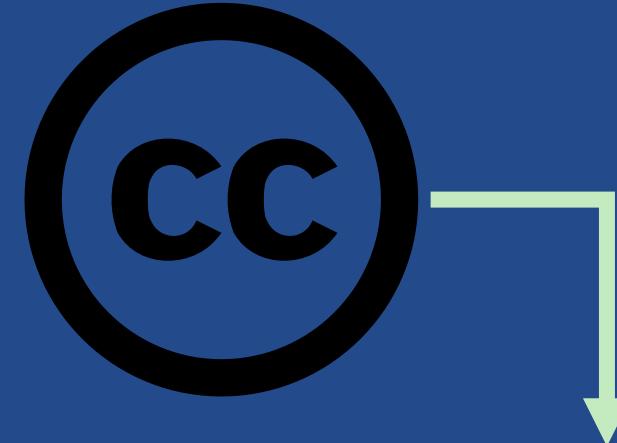


Lucide



Why not just use SVGs?

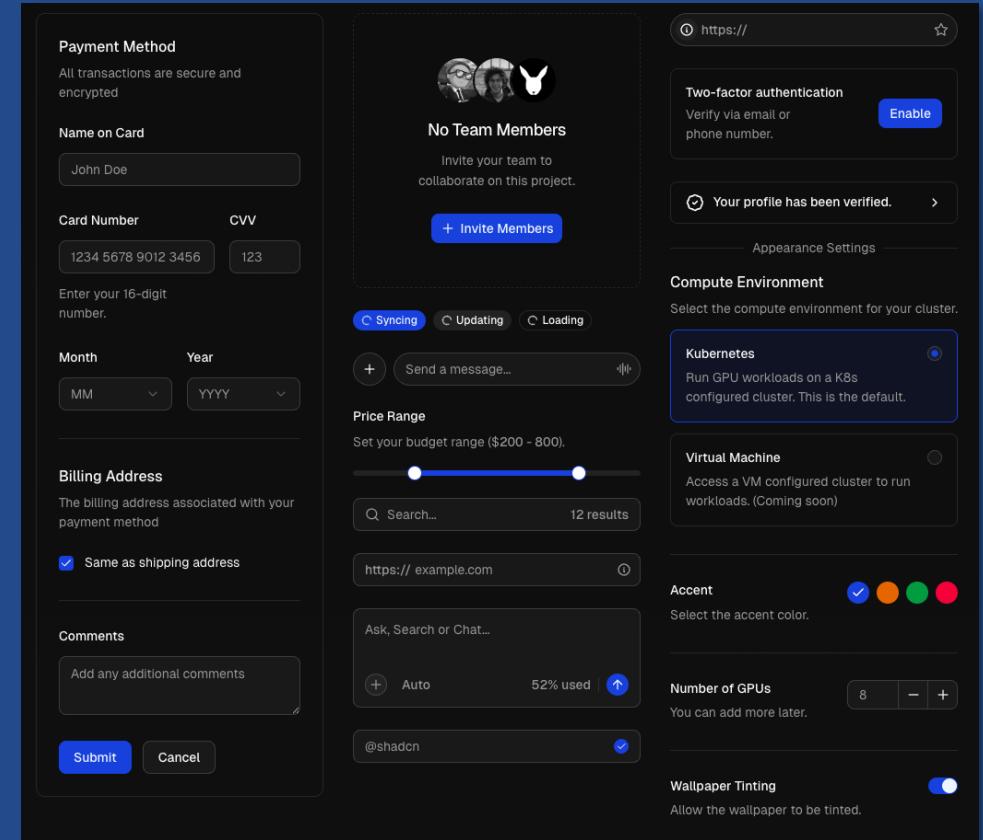
- Problems with raw SVG files:
 - Hard to manage manually
 - Inconsistent sizing
 - No centralized system
 - Confusing to understand when icons get more complex
- Lucide solves:
 - Act as React components
 - Compatible with Tailwind
 - Many to choose from for any common situation



```
<svg xmlns="http://www.w3.org/2000/svg"
viewBox="0 0 100 100">
  <circle cx="50" cy="50" r="43"
fill="none" stroke="#000" stroke-
width="9"/>
  <path d="M50,42c-6-9-20-9,-25,0c-2,5-
2,11,0,16c5,9,19,9,25,0l-6-3c-2,5-9,5-
11,0c-1-1-1-9,0-10c2-5,9-4,11,0z"/>
  <path d="M78,42c-6-9-20-9,-25,0c-2,5-
2,11,0,16c5,9,19,9,25,0l-6-3c-2,5-9,5-
11,0c-1-1-1-9,0-10c2-5,9-4,11,0z"/>
</svg>
```

Shadcn/ui

- Edit and style every component using Tailwind
- Uses Radix for accessibility and clean structure, but stays beginner-friendly
- Includes ready-to-use pieces in the form of React components
- Works with TypeScript



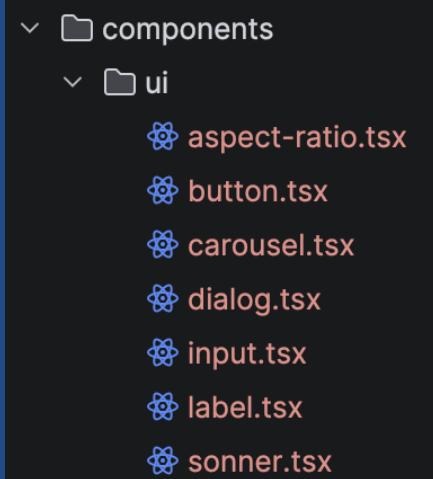
Example: Sonner

- Previously named Toast
- Easy way to show important information
- Very useful; very simple to setup
- Several pre-configured types
 - Default
 - Success
 - Info
 - Warning
 - Error
 - Promise

```
export function SonnerDemo() {
  return (
    <Button
      variant="outline"
      onClick={() =>
        toast("Event has been created", {
          description: "Sunday, December 03, 2023 at 9:00 AM",
          action: {
            label: "Undo",
            onClick: () => console.log("Undo"),
          },
        })
      }
    >
      Show Toast
    </Button>
  )
}
```

Shadcn/ui

```
npx shadcn@latest init
```



```
npx shadcn@latest add button carousel aspect-ratio dialog  
input label sonner
```

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



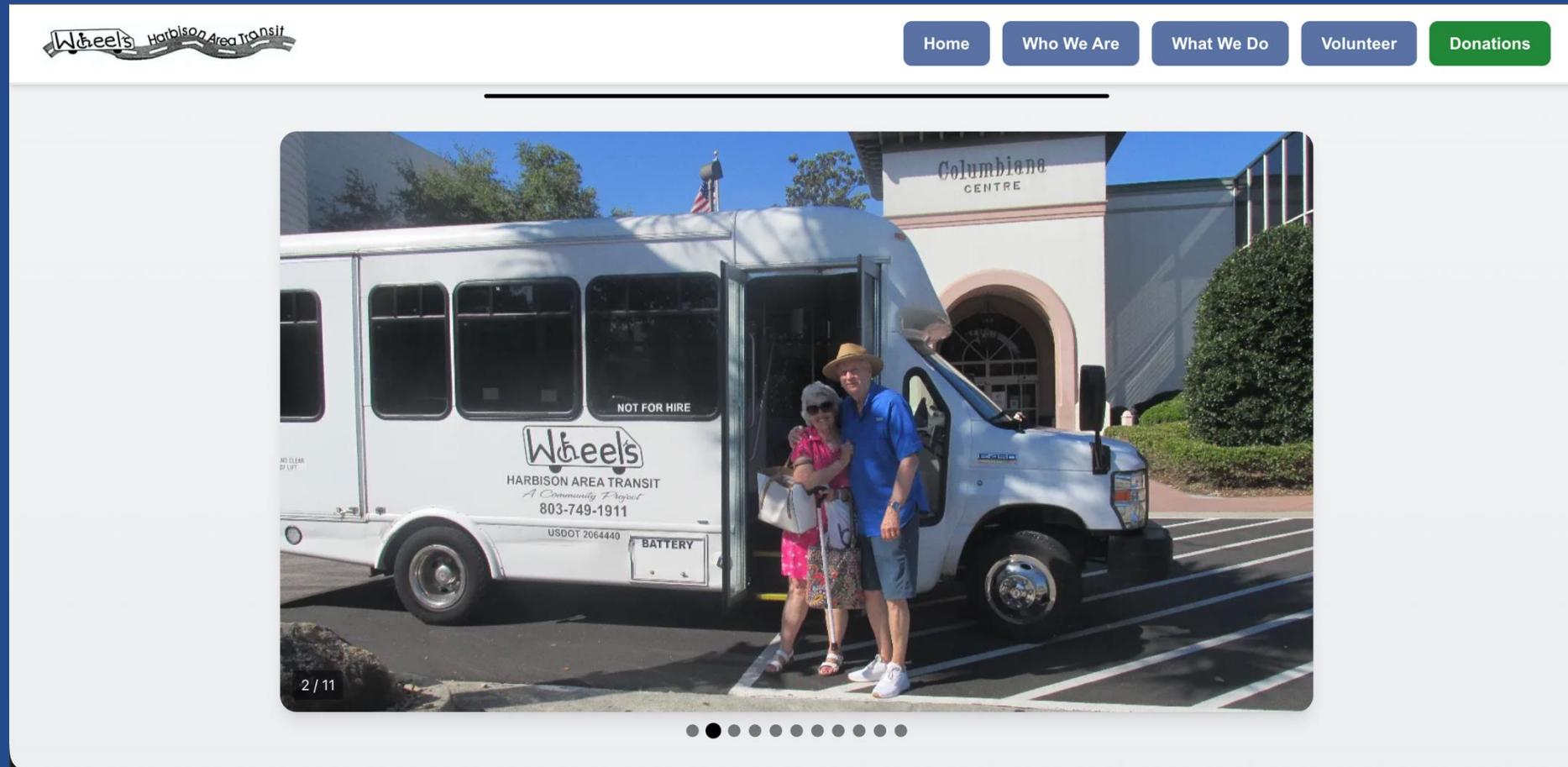
Adding images

- Three common ways:
 1. Static import
 2. public/ folder
 3. Remote images (external)
- Always include alt text!!
- Use <Image> from next/image for optimization (responsive, lazy, blur placeholders)
- When to avoid <Image>: icons/SVG inline usage or CSS background images



/public/ktp.png

Shadcn/ui customized carousel example



Responsivity

- What?
 - The ability of your web app to look and behave seamlessly across different browser types
- Why?
 - Users expect perfect or nearly perfect UX on every device
 - 60%+ of web traffic is mobile users
 - Good responsiveness improves SEO (credibility + conversions)



Responsivity using Tailwind

- Start mobile-first, then build up
- Use Tailwind layout utilities (not custom CSS!)
- Avoid hard-coding sizes as much as possible
 - But at the very least, do not use pixel sizing (px)

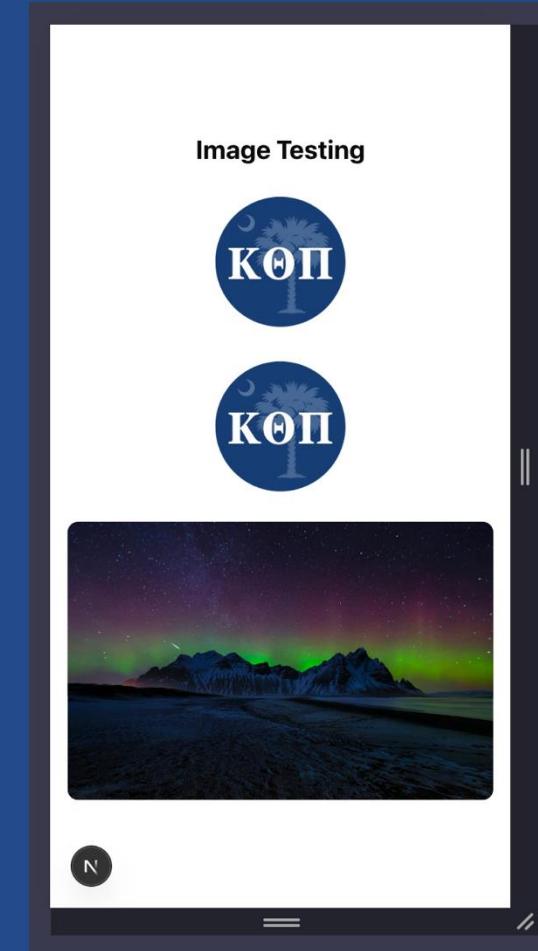
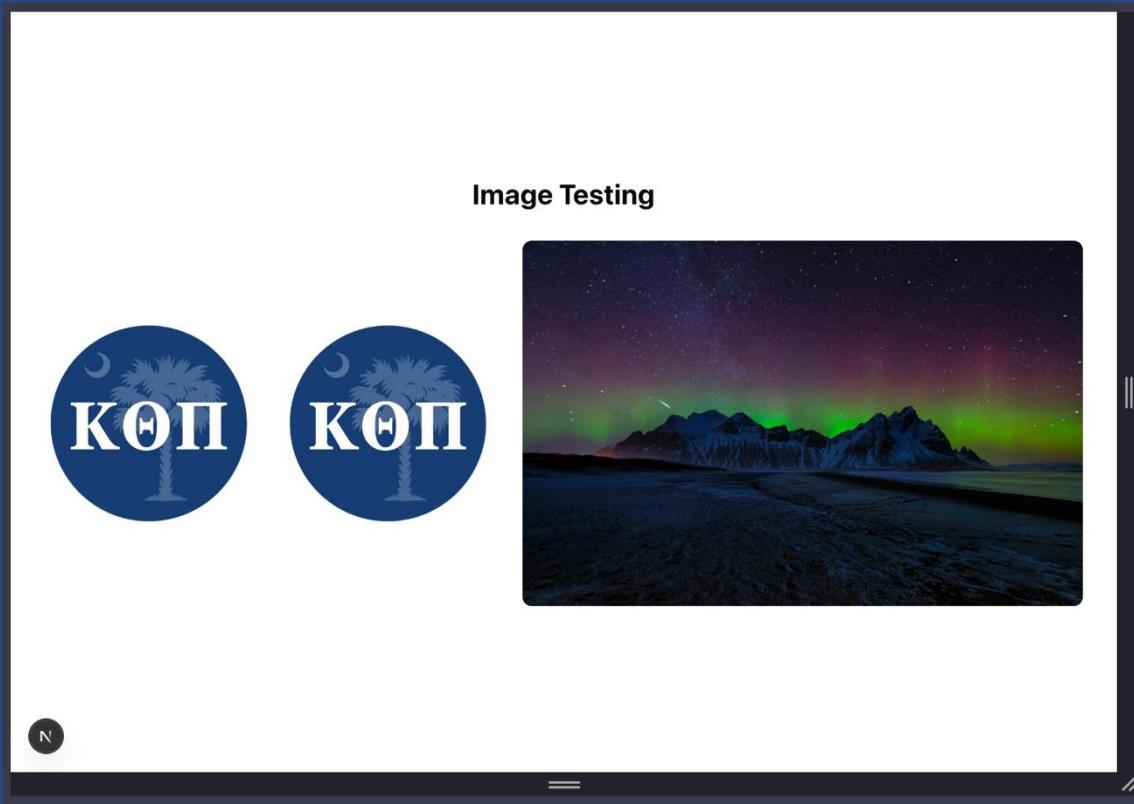
```
<h1 className="text-2xl lg:text-4xl font-bold mb-6">Responsive Demo</h1>
```

Responsivity using Tailwind

Modifier	Min Width	Devices	Example
sm:	≥640px	Small tablets/ phones	sm:text-lg
md:	≥768px	Tablets	md:p-6
lg:	≥1024px	Laptops/ small desktops	lg:flex-row
xl:	≥1280px	Large desktops	xl:text-2xl
2xl:	≥1536px	Very large desktops	2xl:mx-auto

```
<h1 className="text-2xl lg:text-4xl font-bold mb-6">Responsive Demo</h1>
```

Example 1 – Image demo



Example 1 – Image demo

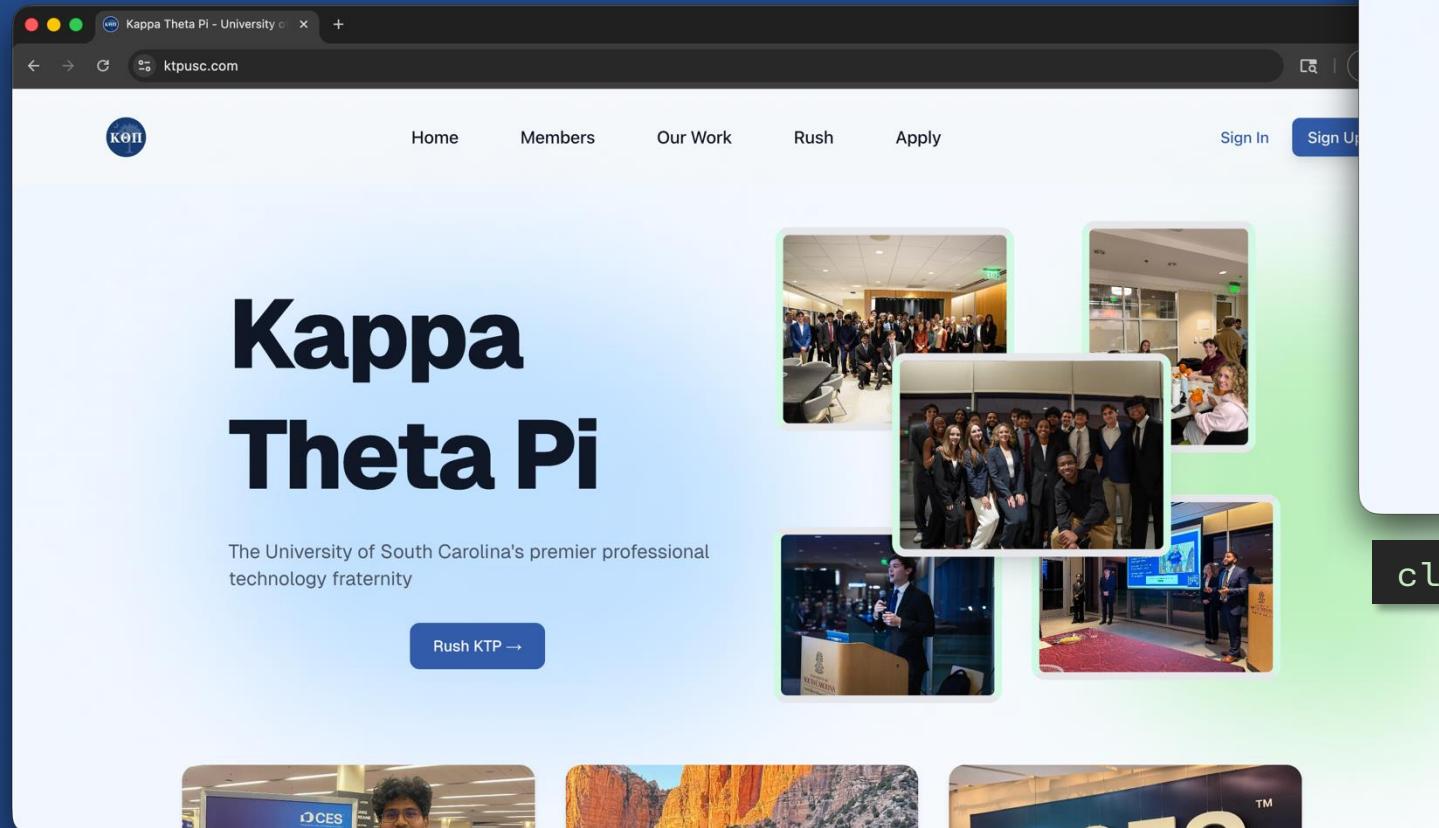
```
return (
  <div className='min-h-screen flex flex-col items-center justify-center gap-6 sm:gap-8 p-4 sm:p-6'>
    <h1 className='text-2xl sm:text-3xl font-bold text-center'>
      Image Testing
    </h1>

    <div className='flex flex-col sm:flex-row flex-wrap items-center justify-center gap-6 sm:gap-8'>
      <Image
        src={ktp}
        alt='KTP logo'
        className='rounded-lg w-32 sm:w-40 md:w-48 lg:w-56 h-auto'
      />

      <Image
        src='/ktp.png'
        alt='KTP logo'
        width={200}
        height={200}
        className='rounded-lg w-32 sm:w-40 md:w-48 lg:w-56 h-auto'
      />

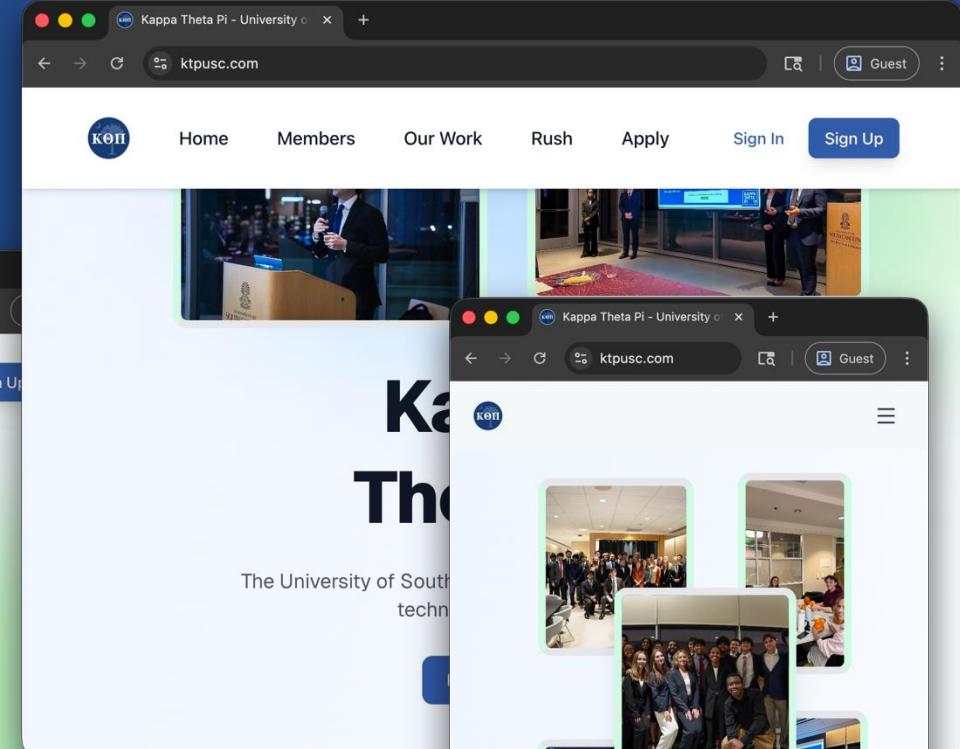
      <Image
        src='https://images.unsplash.com/photo-1759675739458-6e5a4a60a117'
        alt='serene night sky'
        width={900}
        height={600}
        className='rounded-lg w-full sm:w-100 md:w-125 lg:w-150 h-auto'
      />
    </div>
  </div>
);
```

Example 2 – KTP Website



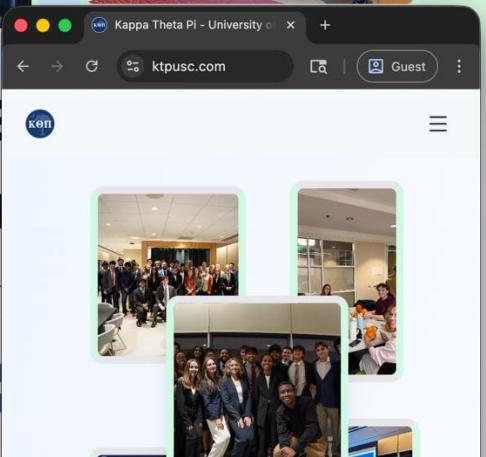
The screenshot shows the desktop version of the Kappa Theta Pi website. At the top, there's a navigation bar with links for Home, Members, Our Work, Rush, Apply, Sign In, and Sign Up. Below the navigation is a large title "Kappa Theta Pi" in bold black font, with a subtitle "The University of South Carolina's premier professional technology fraternity" underneath. A "Rush KTP →" button is located below the subtitle. The main content area features several images of people in professional settings, such as a group photo, individuals at a podium, and a person speaking. A dark blue footer bar at the bottom contains three small images: a person, a landscape, and a large "CES" sign.

className="lg:"



The screenshot shows the mobile version of the Kappa Theta Pi website. It has a similar layout to the desktop version but is adapted for smaller screens. The title "Kappa Theta Pi" is at the top, followed by a "Home" link. Below the title are several images of people, some with green outlines around them, indicating they are responsive components. A dark blue footer bar at the bottom contains three small images: a person, a landscape, and a large "CES" sign.

className="md :"



The screenshot shows the tablet version of the Kappa Theta Pi website. It follows the same design principles as the mobile version but is larger. The title "Kappa Theta Pi" is at the top, followed by a "Home" link. Below the title are several images of people, some with green outlines around them, indicating they are responsive components. A dark blue footer bar at the bottom contains three small images: a person, a landscape, and a large "CES" sign.



Kappa
Theta Pi

The University of South Carolina's

className="sm:"

Example 2 – KTP Website

```
<div className="flex flex-col items-center w-full">
  <section className="px-6 sm:px-8 md:px-16 lg:px-24 xl:px-32 pt-6 pb-8 sm:pt-8 md:pt-10 w-full">
    <div className="relative w-full overflow-visible">
      <div className="max-w-7xl mx-auto px-6 sm:px-8 lg:px-16 grid grid-cols-1 lg:grid-cols-12 gap-8 items-center">
        /* Header + subtitle + Rush button */
        <div className="lg:col-span-6 lg:order-first order-last flex flex-col justify-center items-center lg:items-start">
          <h1 className="whitespace-pre-line">
            <TypeTwoLines
              line1="Kappa"
              line2="Theta Pi"
              speed={70}
              delayBetween={300}
              className="text-6xl md:text-7xl lg:text-[6.25rem] leading-tight font-extrabold tracking-tight" />
          </h1>
          <p className="mt-6 text-lg md:text-xl text-gray-600 max-w-xl">
            The University of South Carolina's premier professional technology fraternity
          </p>
        </div>
        <div className="mt-8 max-w-xl mx-auto flex justify-center">
          <a href="/rush" className="inline-flex items-center justify-center bg-[#315CA9] text-white px-6 py-3 rounded-lg">
            Rush KTP →
          </a>
        </div>
      </div>
    </div>
  </section>
</div>
```



Questions?