Enhancing Frontend

## Tech Workshop #2

Feb 16, 2026

From here on…
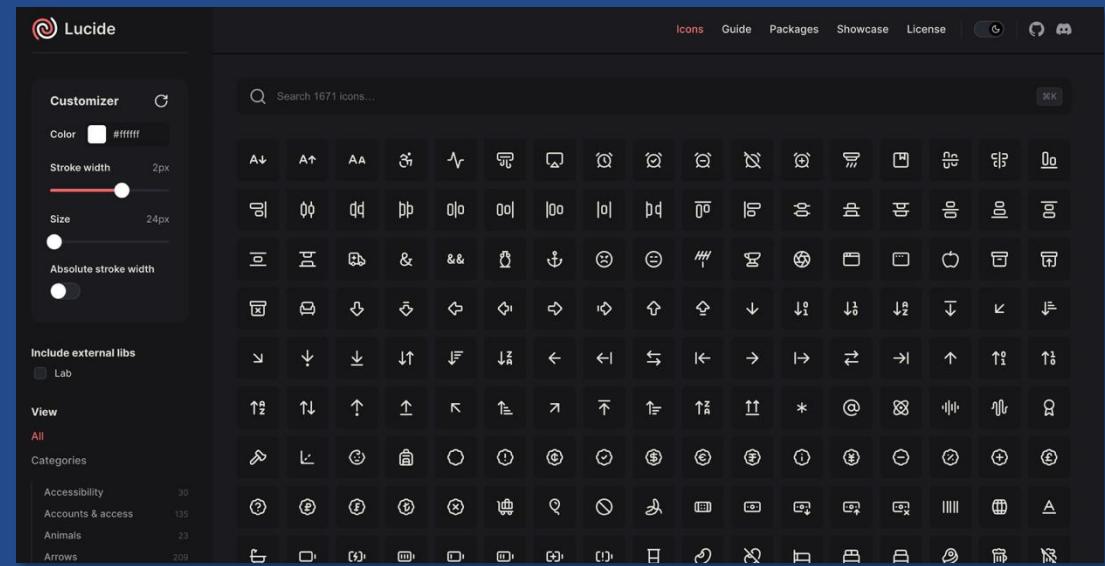
Agenda
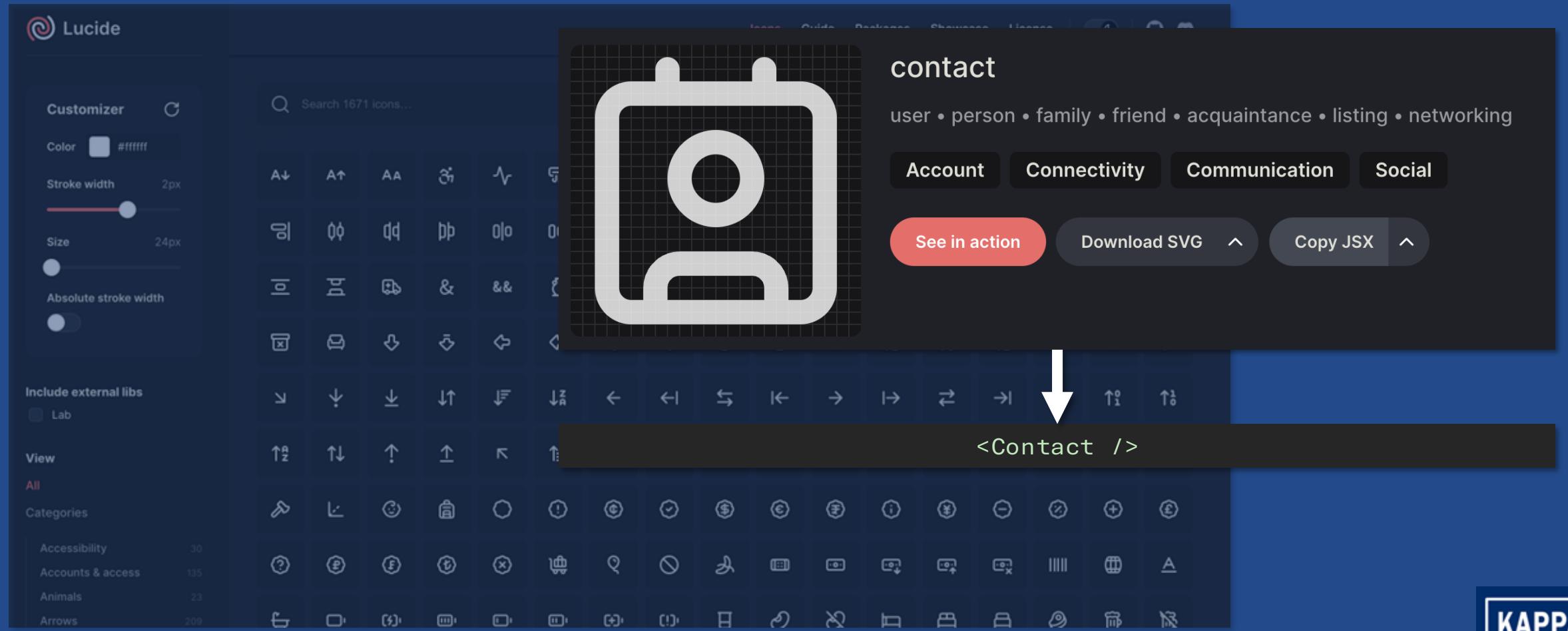
1. Questions from last workshop

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
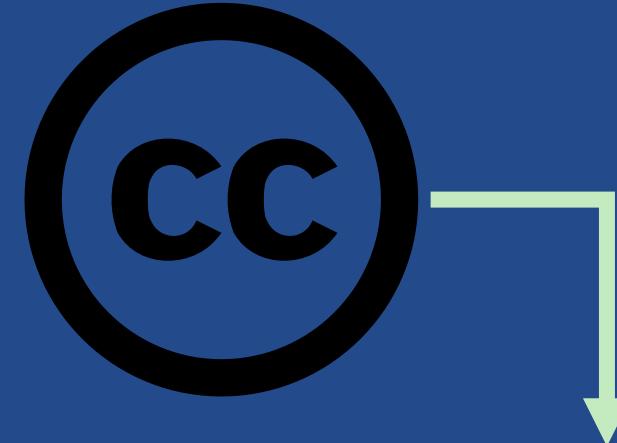
# Lucide

Why not just use SVGs?
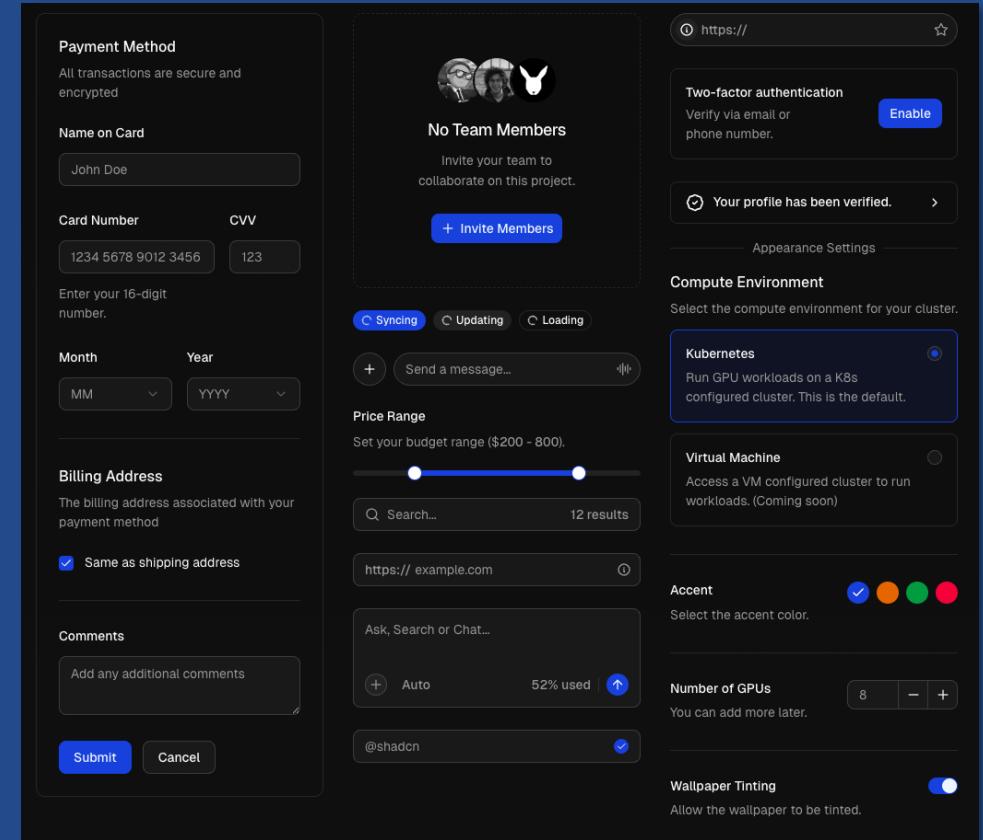
- Problems with raw SVG files:
  - Hard to manage manually
  - Inconsistent sizing
  - No centralized system
  - Confusing to understand when icons get more complex
- Lucide solves:
  - Act as React components
  - Compatible with Tailwind
  - Many to choose from for any common situation

```
<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

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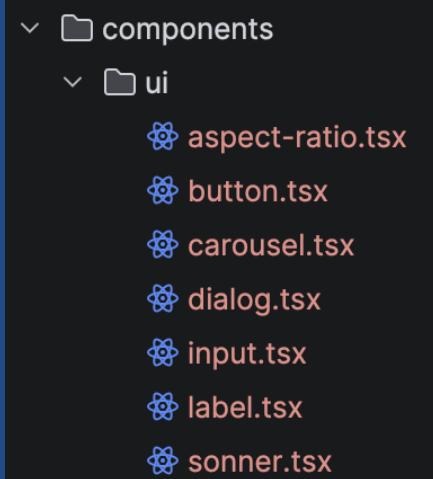
Example: Sonner

- 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

Event has been created
Sunday, December 03, 2023 at 9:00 AM
Undo

⚠ Event start time cannot be earlier than 8am

↻ Loading...

```
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>
  )
}
```

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Shadcn/ui


```
npx shadcn@latest init
```

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

https://ui.shadcn.com/docs/components
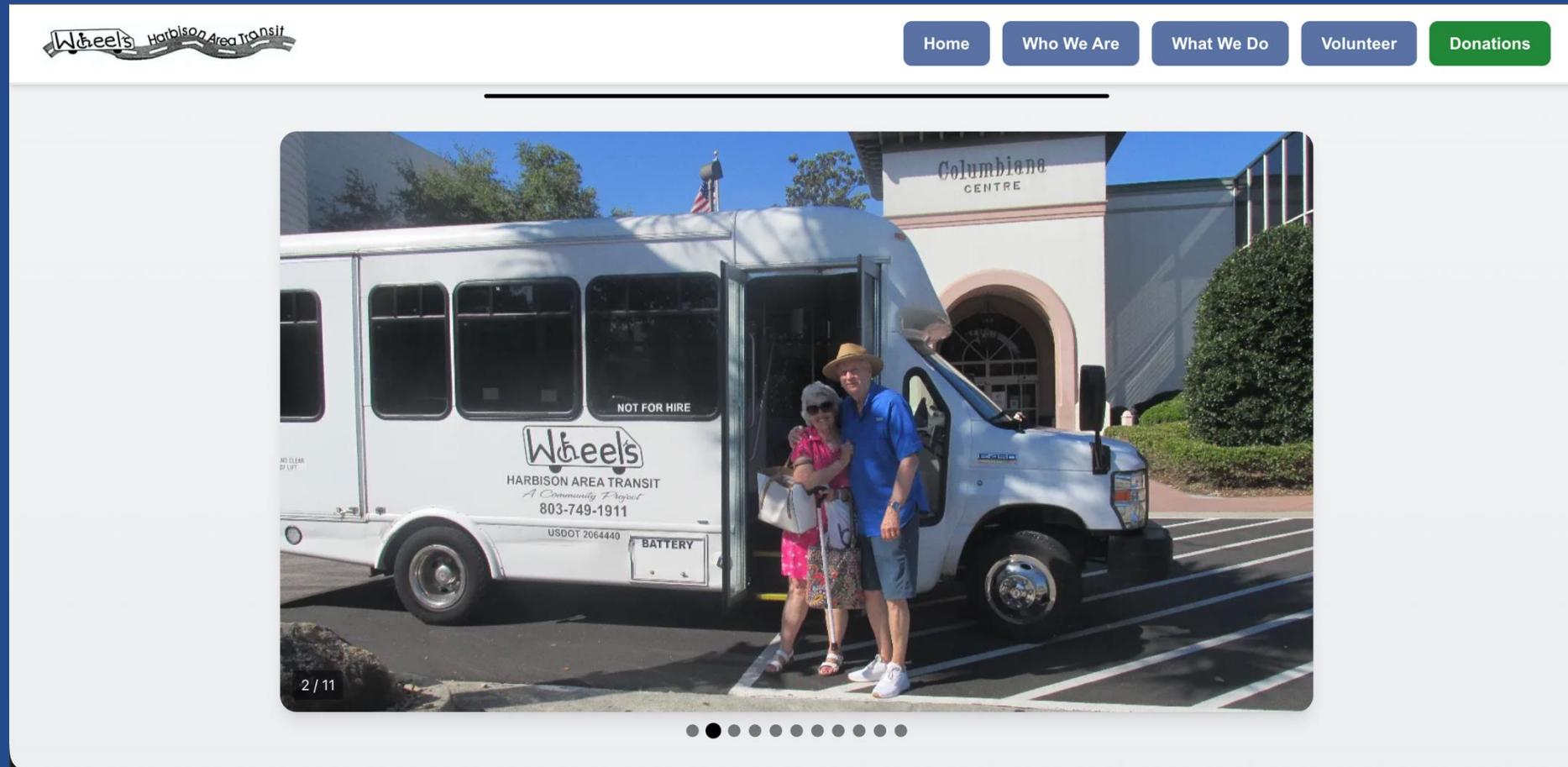
Adding images

- 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`

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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)

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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>
```

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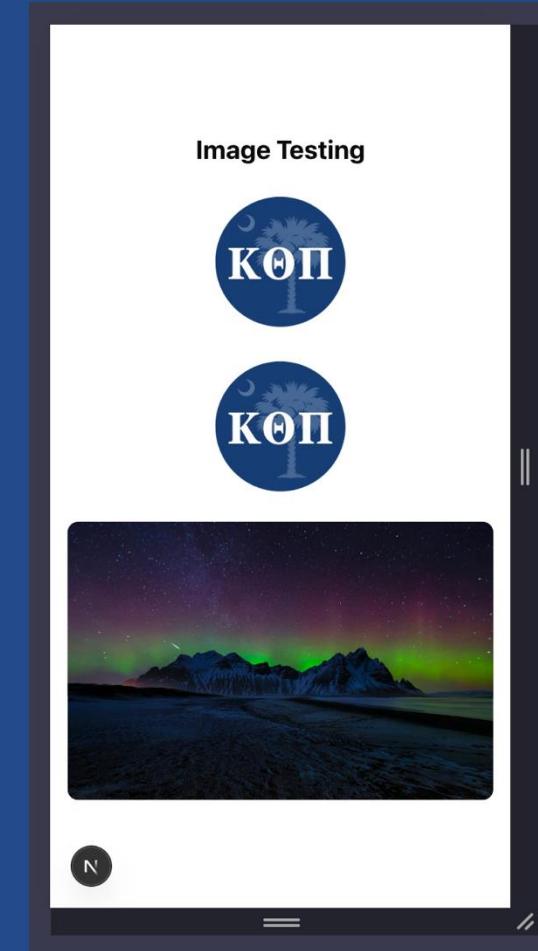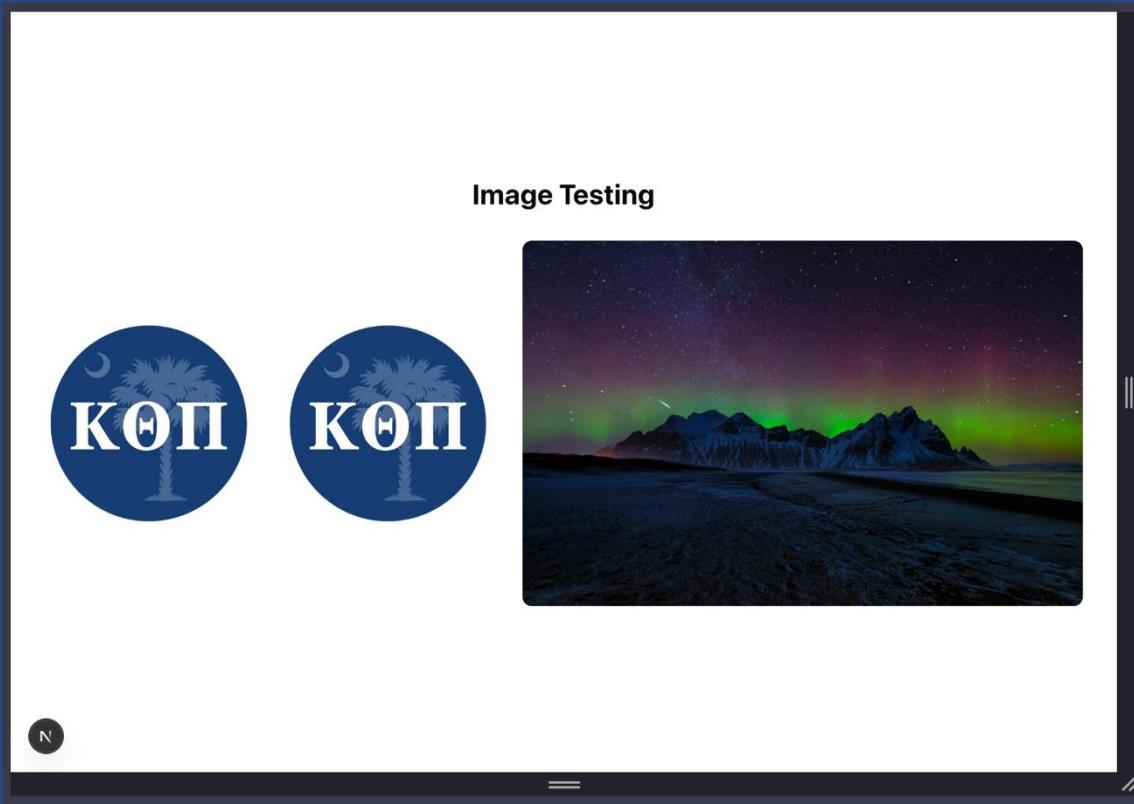
Responsivity using Tailwind

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>
```

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Example 1 – Image demo

Example 1 – Image demo
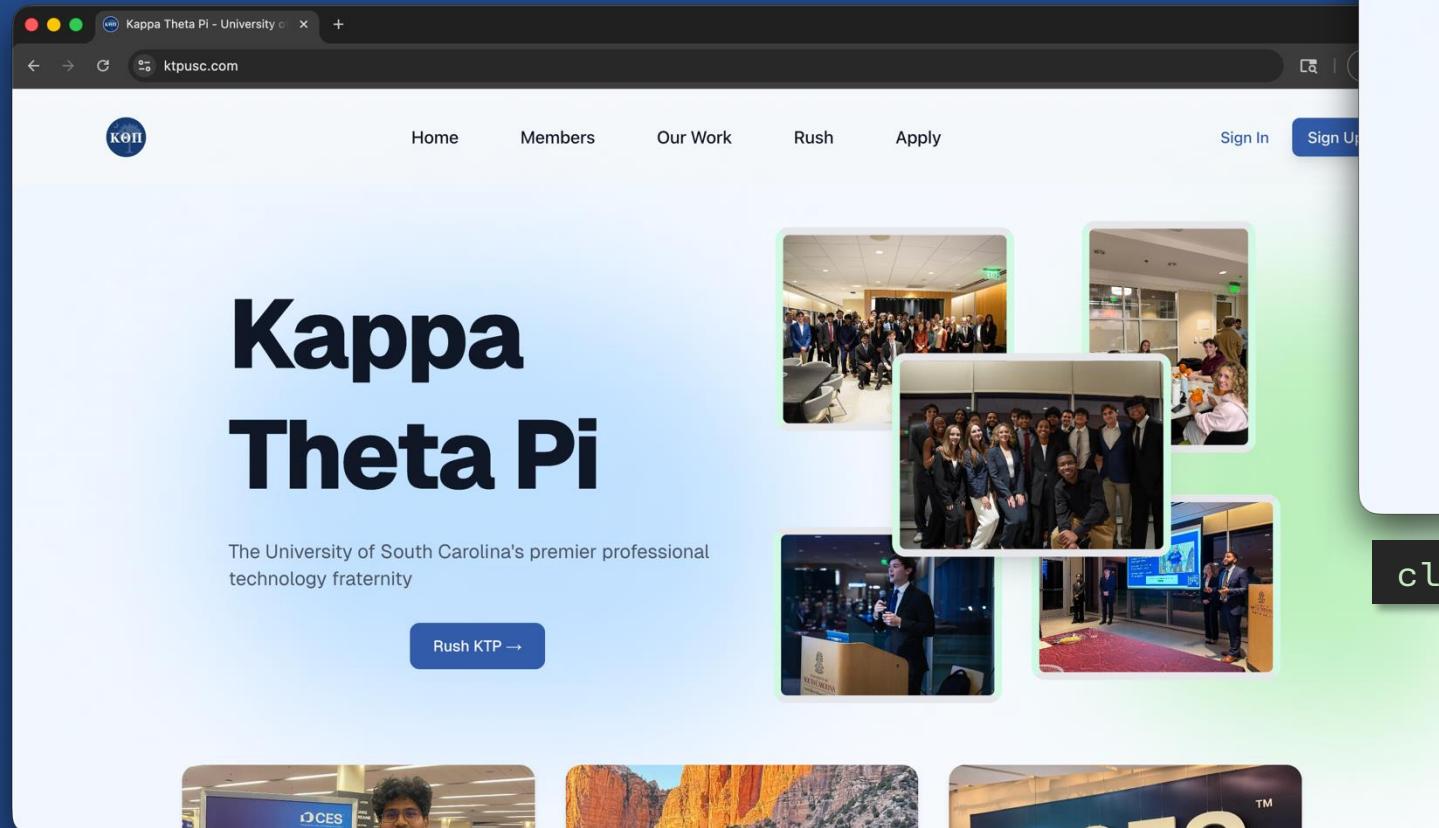
```
return (
    <div className='min-h-screen flex flex-col items-center justify-center gap-6 sm:gap-8 p-4 sm:p-6'>
        <h1 className='text-2xl sm:text-3xl font-bold text-center'>
            Image Testing
        </h1>

        <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>
);
```
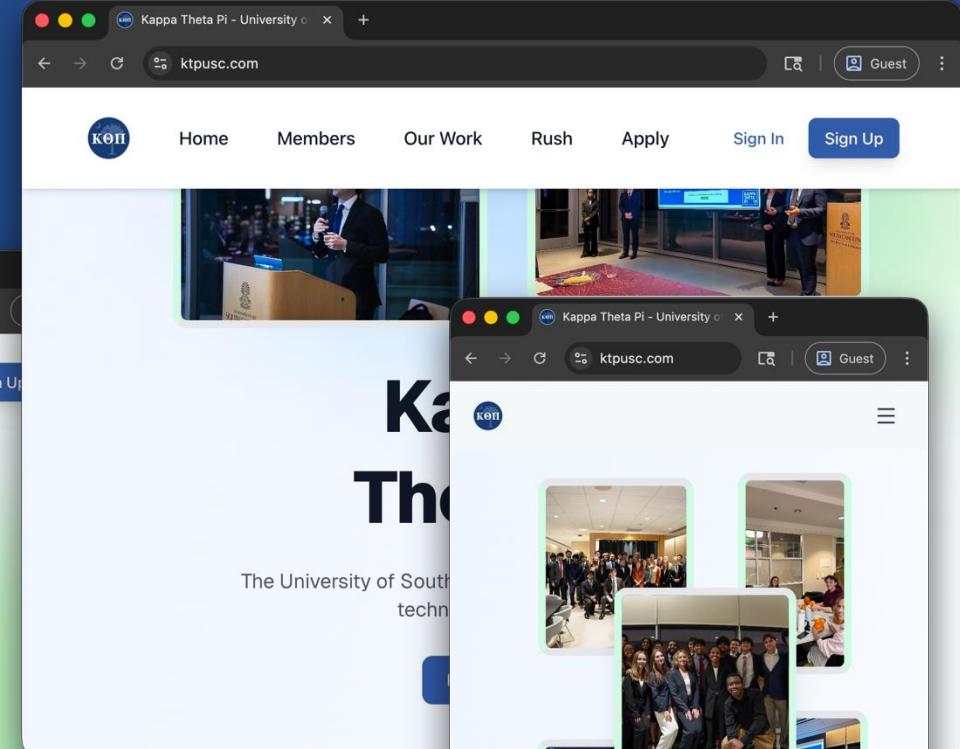
Example 2 – KTP Website

className="lg:"

className="md:"

className="sm:"

Example 2 – KTP Website

Questions?