**Icon Libraries**

1. [react-icons](https://react-icons.github.io/react-icons)
   1. Installation

yarn add react-icons

* 1. Customization
* customize using css attribute
  + size: font-size
  + color: color or fill (fill can overwrite color)
  + background color: background-color
  + opacity: opacity
* icons from some libraries have some different customized properties, for example, icon from Feather library would customize outline color by using color or stroke property instead of fill which fills icon with the selected color whereas color and fill property of others do the same.
* downsides of this package is that it can't use some property of the origin library, for example, icons from react-icons/ai cannot use spin property to show spinning animation as in icons from @ant-design/icons, we have to implement our own css code to display this property.
  1. Icon diversity
     + more than 20000+ icons in total from various libraries
     + Although it contains many icons, the theme of icons from some origin libraries is excluded.
  2. Usage
     + import icons into code and use them as normal React components

syntax:

import { IconName } from 'react-icons/<library-initials>';

example:

import { FaBeer } from 'react-icons/fa';

using icons:

<FaBeer />;

1. [Ant Design Icons](https://ant.design/components/icon/)
   1. Installation

yarn add @ant-design/icons

* 1. Customization
     + There are three icon themes including Outlined, Filled, and Two tone but not every icon has all of them.
     + Component name of icons with different theme is the icon name suffixed by the theme name. Specify the spin property to show spinning animation except LoadingOutlined icon that has spin property as default.
     + twoTone icons can specify the primary color for twoToneColor property of the icon.
* customize using css attribute
  + size: font-size
  + color: color
  + background color: background-color
  + opacity: opacity
  1. Icon diversity
     + around 800 icons in total.
  2. Usage
     + import icons into code and use them as normal React components

syntax:

import { IconName } from '@ant-design/icons';

example:

import { HeartFilled } from '@ant-design/icons';

using icons:

<HeartFilled />;

1. [Font Awesome](https://fontawesome.com/v5/docs/web/use-with/react)
   1. Installation
      1. install packages

yarn add @fortawesome/fontawesome-svg-core

yarn add @fortawesome/free-solid-svg-icons

yarn add @fortawesome/react-fontawesome

* + 1. (optional) install additional styles packages to use them for Pro icons (Pro Plan: $99 per year)

yarn add @fortawesome/pro-solid-svg-icons

yarn add @fortawesome/pro-regular-svg-icons

yarn add @fortawesome/pro-light-svg-icons

yarn add @fortawesome/pro-duotone-svg-icons

* + 1. (optional) install brand icons

yarn add @fortawesome/free-brands-svg-icons

* 1. Customization
* customize using css attribute
  + size: controlled with CSS font-size and FontAwesomeIcon's size prop determines icon size relative to the current font-size.
  + color: color
  + background color: background-color
  + opacity: opacity
* For Pro plan includes additional styles including solid, regular, light, and duotone.
  1. Icon diversity
     + 7864 icons in total, 1608 free icons
  2. Usage
* There are two import options
  + - * + Individual use:

syntax:

import { FontAwesomeIcon } from '@fortawesome/react-fontawesome';

import { faIconName } from '@fortawesome/free-solid-svg-icons';

use icon as:

<FontAwesomeIcon icon={faIconName}/>;

example:

import { FontAwesomeIcon } from '@fortawesome/react-fontawesome';

import { faCoffee } from '@fortawesome/free-solid-svg-icons';

Use icons as:

<FontAwesomeIcon icon={faCoffee} />;

* + - * + Global use:

import { library } from '@fortawesome/fontawesome-svg-core';

import { fab } from '@fortawesome/free-brands-svg-icons';

import { fas } from '@fortawesome/free-solid-svg-icons';

library.add(fab, fas);

Using icons as:

syntax:

<FontAwesomeIcon icon=”icon-name” />

or

<FontAwesomeIcon icon={[ “icon-library” , “icon-name”]} />

example:

<FontAwesomeIcon icon="coffee" />

<FontAwesomeIcon icon={['fas', 'coffee']} />

* + Icon Library names are fa followed by the first letter of icon styles, for example, fas is solid icon library, far is regular icon library and for fab is brand icon library.

1. [react-feather](https://feathericons.com/)
   1. Installation

yarn add react-feather

* 1. Customization
* customize using css attribute
  + size: it can be done by putting the desire size in the component
    - example: <IconName size={48} />
  + color: color
  + fill icon color: fill
  + background color: background-color
  + opacity: opacity
  1. Icon diversity
     + 287 icons
  2. Usage
     + import icons into code and use them as normal React components

syntax:

import { IconName } from 'react-feather';

example:

import { Camera } from 'react-feather;

using icons:

<Camera />

* to import the whole icon pack

syntax:

import \* as Icon from “react-feather”;

using icons:

<Icon.Camera />

1. [styled-icons](https://styled-icons.dev/)
   1. Installation

yarn add react-icons

* 1. Customization
* customize using css attribute
  + size: can be done by putting the desire size in the component
    - example: <IconName size={48} />
  + color: color or fill (fill can overwrite color)
  + background color: background-color
  + opacity: opacity
  1. Icon diversity
     + more than 20000 icons
  2. Usage
     + import icons into code and use them as normal React components

syntax:

import { IconName } from @styled-icons/<icon-pack>';

or

import { IconName } from @styled-icons/<icon-pack>/IconName'; for individual icon

example:

import { Lock } from '@styled-icons/material';

using icons:

<Lock />

1. [bootstrap-icons](https://icons.getbootstrap.com/)
   1. Installation

yarn add bootstrap-icons

* 1. Customization
* customize using css attribute
  + size: it can be done by putting the desire width and height inside the svg tag.
  + color: color or fill (fill can overwrite color)
  + background color: background-color
  + opacity: opacity
  + there is another custom props which is title that sets the title and enables the standalone icon accessibility mode.
  1. Icon diversity
     + more than 20000+ icons
     + Although it contains many icons, the theme of icons from some origin libraries is excluded.
  2. Usage
     + embedded icons

example:

<svg xmlns="http://www.w3.org/2000/svg" width="32" height="32" fill="currentColor" class="bi bi-chevron-right" viewBox="0 0 16 16"><path fill-rule="evenodd" d="M4.646 1.646a.5.5 0 0 1 .708 0l6 6a.5.5 0 0 1 0 .708l-6 6a.5.5 0 0 1-.708-.708L10.293 8 4.646 2.354a.5.5 0 0 1 0-.708z"/></svg>