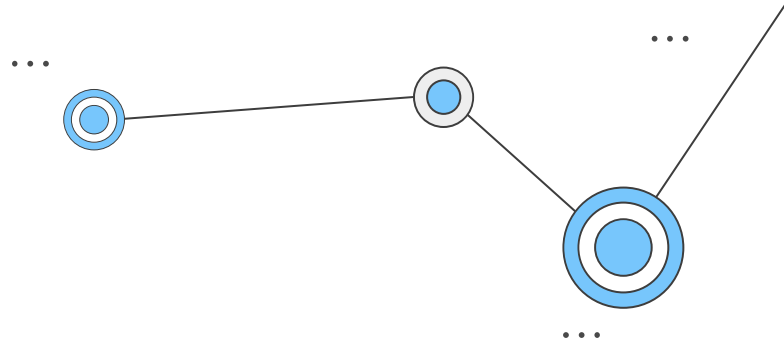
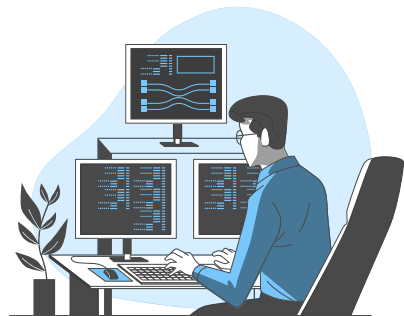


# tailwindcss



## Khóa học Frontend

### Bài 15: Học Tailwind CSS (Tiết 1)



# Nội dung

01

Khái niệm

...

02

Cấu hình project

...

03

Typography

...

04

Borders

...

05

Spacing

...

06

Sizing

...

07

Backgrounds

...

08

Layout

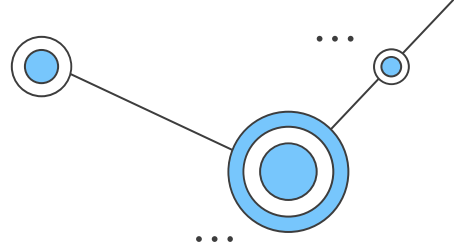
...



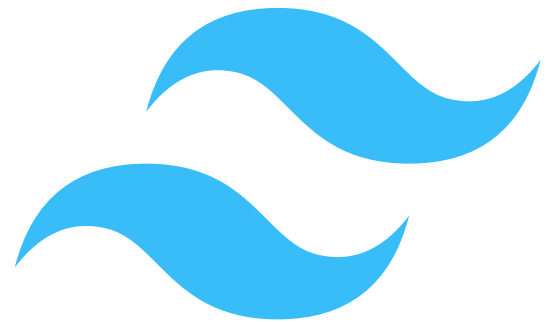
# 01

Khái niệm

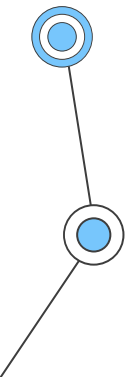
# 01. Khái niệm



- Tailwind CSS là một framework CSS.
- **Cung cấp các class CSS** để tạo ra giao diện **hiện đại, nhanh chóng** và **linh hoạt**.
- Trang chủ: <https://tailwindcss.com>



**tailwindcss**

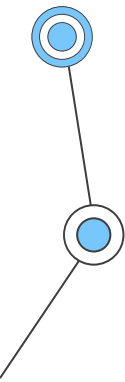
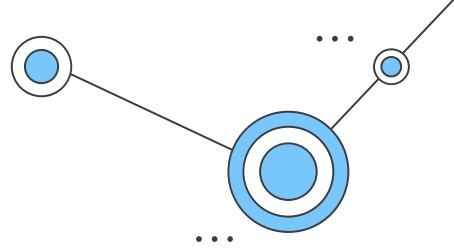


# 02

## Cấu hình project

## 02. Cấu hình project

- *Hướng dẫn trong buổi học.*





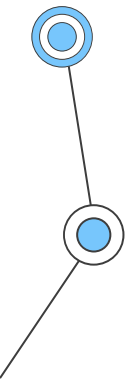
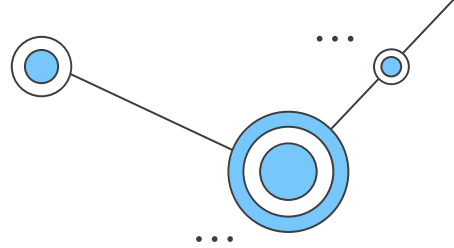
03

Typography



## 3.1. Font Size

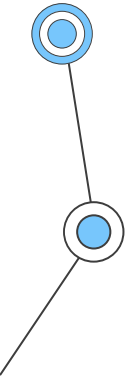
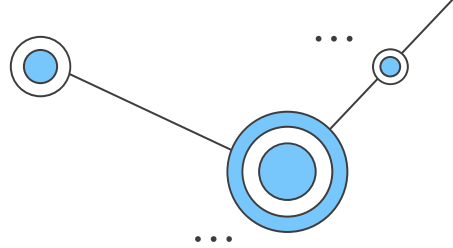
Class	Thuộc tính
text-xs	font-size: 12px;
text-sm	font-size: 14px;
text-base	font-size: 16px;
text-lg	font-size: 18px;
text-xl	font-size: 20px;
text-2xl	font-size: 24px;
text-3xl	font-size: 30px;
text-4xl	font-size: 36px;
text-5xl	font-size: 48px;
text-6xl	font-size: 60px;
text-7xl	font-size: 72px;
text-8xl	font-size: 96px;
text-9xl	font-size: 128px;
text-[value]	font-size: value;





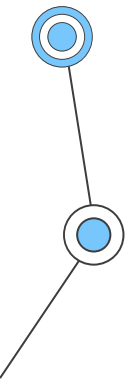
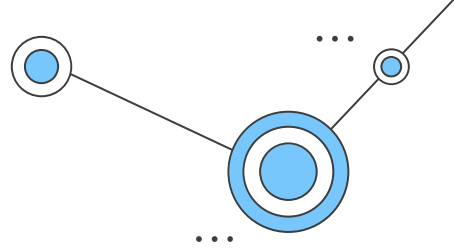
## 3.2. Font Style

Class	Thuộc tính
italic	font-style: italic;
not-italic	font-style: normal;



### 3.3. Font Weight

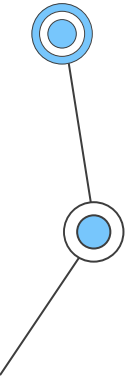
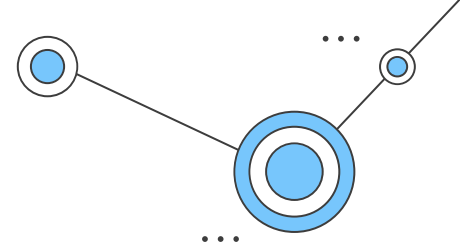
Class	Thuộc tính
font-thin	font-weight: 100;
font-extralight	font-weight: 200;
font-light	font-weight: 300;
font-normal	font-weight: 400;
font-medium	font-weight: 500;
font-semibold	font-weight: 600;
font-bold	font-weight: 700;
font-extrabold	font-weight: 800;
font-black	font-weight: 900;



## 3.4. Line Clamp

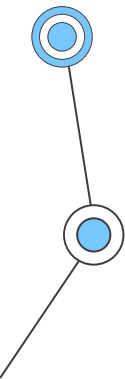
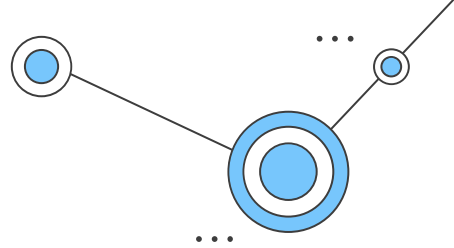
Kiểu như số lượng dòng tối đa,  
nếu vượt qua sẽ bị ẩn

Class	Ý nghĩa
line-clamp-1	1 dòng
line-clamp-2	2 dòng
line-clamp-3	3 dòng
line-clamp-4	4 dòng
line-clamp-5	5 dòng
line-clamp-6	6 dòng
line-clamp-none	Như ban đầu
line-clamp-[value]	value: số lượng dòng



## 3.5. Text Align

Class	Thuộc tính
text-left	text-align: left;
text-center	text-align: center;
text-right	text-align: right;
text-justify	text-align: justify;

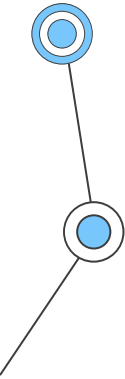
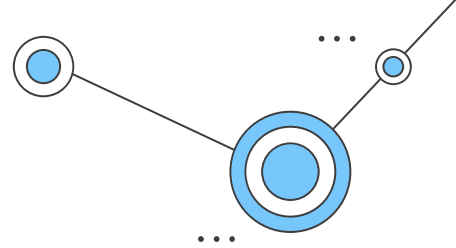


## 3.6. Text Color

trong suốt

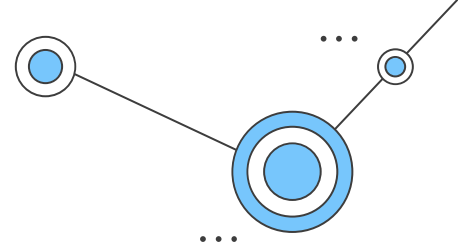


Class	Thuộc tính
text-transparent	color: transparent;
text-[value]	color: value;



## 3.7. Text Transform

Class	Thuộc tính
uppercase	text-transform: uppercase;
lowercase	text-transform: lowercase;
capitalize	text-transform: capitalize;
normal-case	text-transform: none;





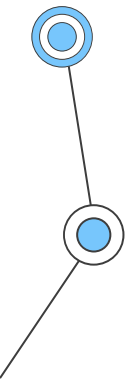
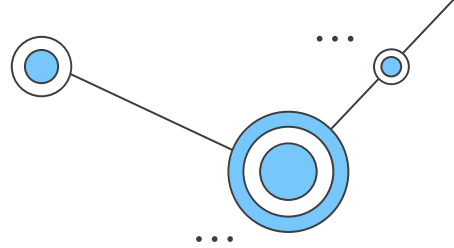
**04**

**Borders**



## 4.1. Border Width

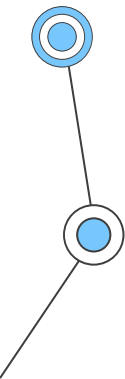
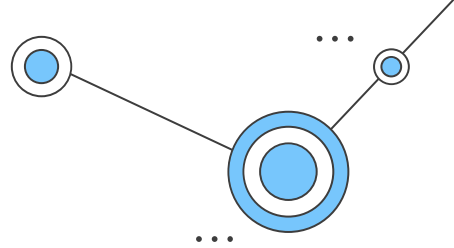
Class	Thuộc tính
border-0	border-width: 0px;
border	border-width: 1px;
border-2	border-width: 2px;
border-4	border-width: 4px;
border-8	border-width: 8px;
border-[value]	border-width: value;





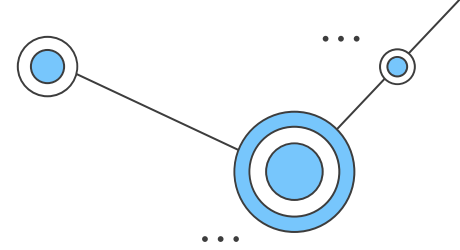
## 4.2. Border Color

Class	Thuộc tính
border-transparent	border-color: transparent;
border-[value]	border-color: value;



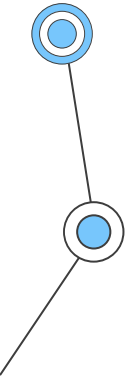
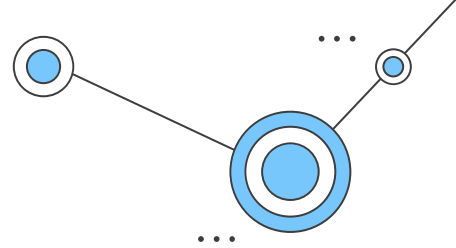
## 4.3. Border Style

Class	Thuộc tính
border-solid	border-style: solid;
border-dashed	border-style: dashed;
border-dotted	border-style: dotted;
border-hidden	border-style: hidden;
border-none	border-style: none;



## 4.4. Border Radius

Class	Thuộc tính
rounded-none	border-radius: 0px;
rounded-sm	border-radius: 2px;
rounded	border-radius: 4px;
rounded-md	border-radius: 6px;
rounded-lg	border-radius: 8px;
rounded-xl	border-radius: 12px;
rounded-2xl	border-radius: 16px;
rounded-3xl	border-radius: 24px;
rounded-full	border-radius: 9999px;
rounded-[value]	border-radius: value;





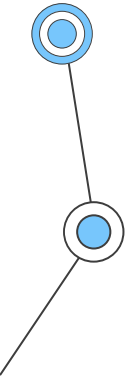
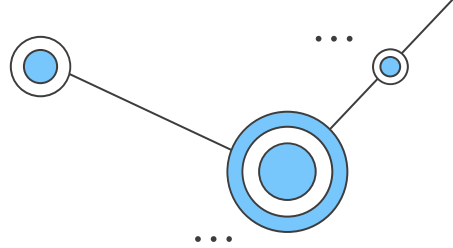
05

Spacing



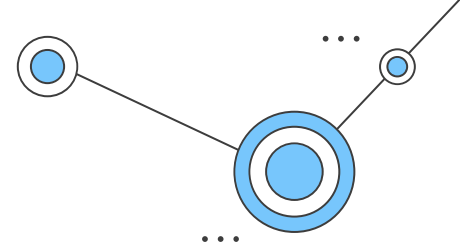
## 5.1. Padding

Class	Thuộc tính
p-0	padding: 0px;
p-0.5	padding: 2px;
p-1	padding: 4px;
p-2	padding: 8px;
p-3	padding: 12px;
p-4	padding: 16px;
...	...
p-[value]	padding: value;



## 5.2. Margin

Class	Thuộc tính
m-0	margin: 0px;
m-0.5	margin: 2px;
m-1	margin: 4px;
m-2	margin: 8px;
m-3	margin: 12px;
m-4	margin: 16px;
m-auto	margin: auto;
...	...
m-[value]	margin: value;

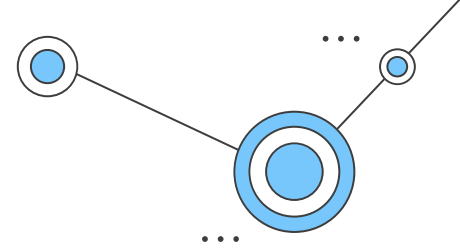


06

Sizing

## 6.1. Width

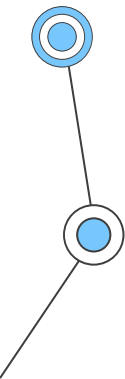
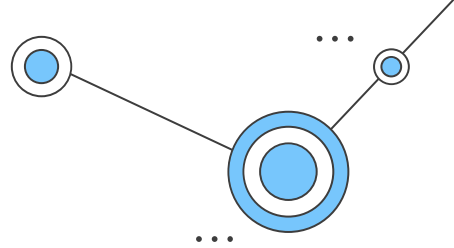
Class	Thuộc tính
w-0	width: 0px;
w-0.5	width: 2px;
w-1	width: 4px;
w-2	width: 8px;
w-3	width: 12px;
w-4	width: 16px;
w-auto	width: auto;
w-1/2	width: 50%;
w-1/3	width: 33.333333%;
w-2/3	width: 66.666667%;
w-full	width: 100%;
...	...
w-[value]	width: value;





## 6.2. Height

Class	Thuộc tính
h-0	height: 0px;
h-0.5	height: 2px;
h-1	height: 4px;
h-2	height: 8px;
h-3	height: 12px;
h-4	height: 16px;
h-auto	height: auto;
h-1/2	height: 50%;
h-1/3	height: 33.333333%;
h-2/3	height: 66.666667%;
h-full	height: 100%;
...	...
h-[value]	height: value;





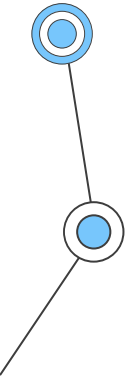
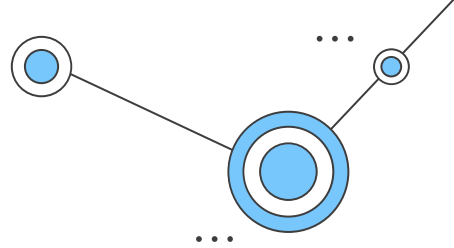
07

Backgrounds



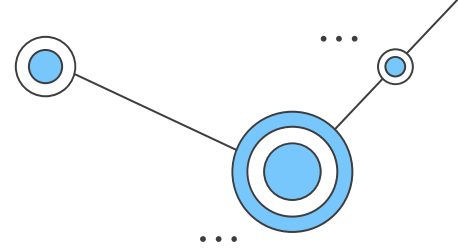
## 7.1. Background Color

Class	Thuộc tính
bg-transparent	background-color: transparent;
bg-[value]	background-color: value;



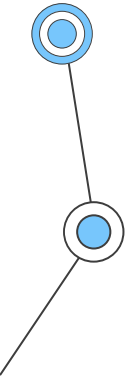
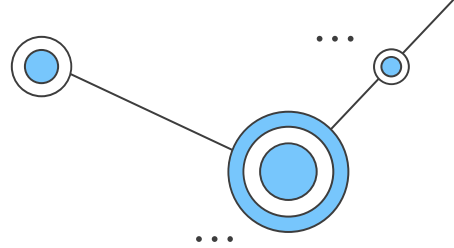
## 7.2. Background Image

Class	Thuộc tính
bg-none	background-image: none;
bg-[url('link...')]	background-image: url('link...');



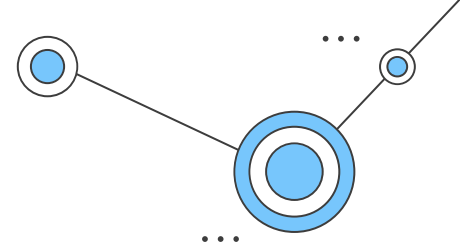
## 7.3. Background Size

Class	Thuộc tính
bg-auto	background-size: auto;
bg-cover	background-size: cover;
bg-contain	background-size: contain;
bg-[length:width_height]	width: Chiều rộng height: Chiều cao



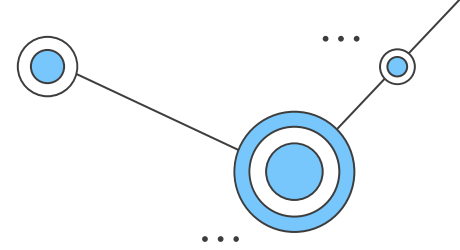
## 7.4. Background Repeat

Class	Thuộc tính
bg-repeat	background-repeat: repeat;
bg-no-repeat	background-repeat: no-repeat;
bg-repeat-x	background-repeat: repeat-x;
bg-repeat-y	background-repeat: repeat-y;



## 7.5. Background Position

Class	Thuộc tính
bg-bottom	background-position: bottom;
bg-center	background-position: center;
bg-left	background-position: left;
bg-left-bottom	background-position: left bottom;
bg-left-top	background-position: left top;
bg-right	background-position: right;
bg-right-bottom	background-position: right bottom;
bg-right-top	background-position: right top;
bg-top	background-position: top;





08

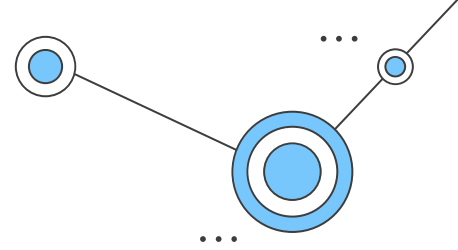
Layout





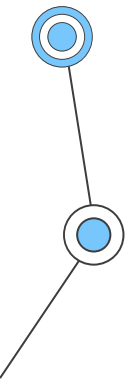
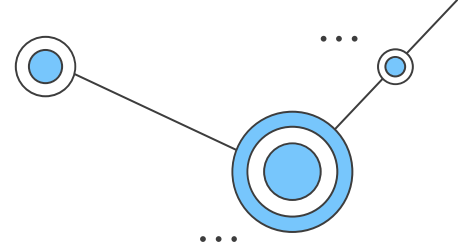
## 8.1. Aspect Ratio

Class	Thuộc tính
aspect-auto	aspect-ratio: auto;
aspect-square	aspect-ratio: 1 / 1;
aspect-video	aspect-ratio: 16 / 9;
aspect-[width/height]	aspect-ratio: width / height;



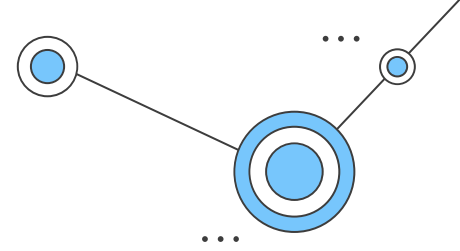
## 8.2. Container

Class	Điểm ngắt	Thuộc tính
<b>container</b>	None	width: 100%;
	sm (640px)	max-width: 640px;
	md (768px)	max-width: 768px;
	lg (1024px)	max-width: 1024px;
	xl (1280px)	max-width: 1280px;
	2xl (1536px)	max-width: 1536px;



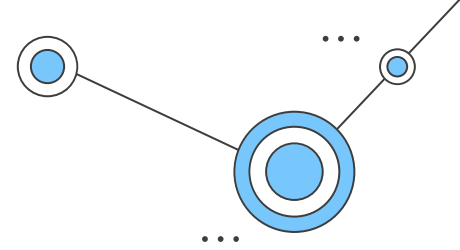
## 8.3. Display

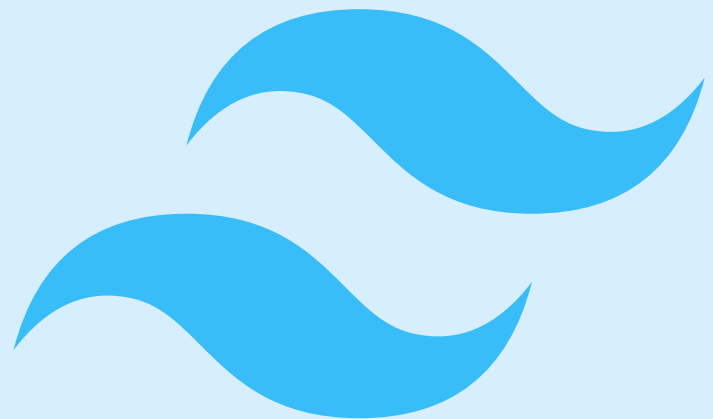
Class	Thuộc tính
block	display: block;
inline-block	display: inline-block;
inline	display: inline;
flex	display: flex;
inline-flex	display: inline-flex;
hidden	display: none;



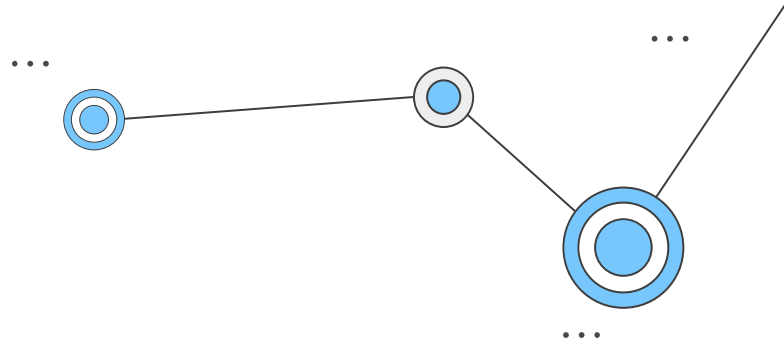
## 8.4. Object Fit

Class	Thuộc tính
object-contain	object-fit: contain;
object-cover	object-fit: cover;
object-none	object-fit: none;



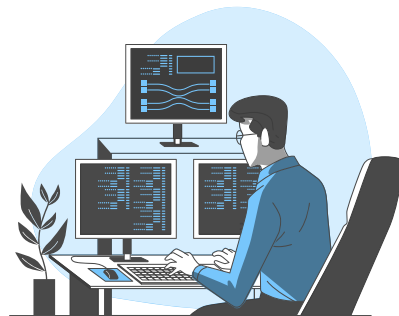


**tailwindcss**



# **Khóa học Frontend**

## **Bài 16: Học Tailwind CSS (Tiết 2)**



# Nội dung

01

Layout (Tiếp)

...

02

Flexbox

...

03

Grid

...

04

Effects

...

05

Responsive Design

...

06

Theme Configuration  
(Customization)

...

07

Giới thiệu Project 3  
(Sử dụng Tailwind CSS)

...

08

Dựng cấu trúc thư mục

...

09

Dựng các file base

...





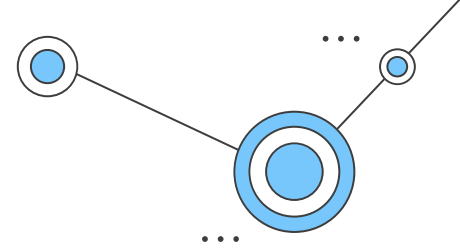
# 01

Layout (Tiếp)



# 1.1. Overflow

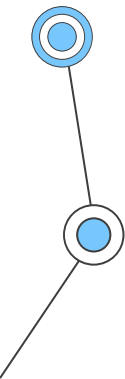
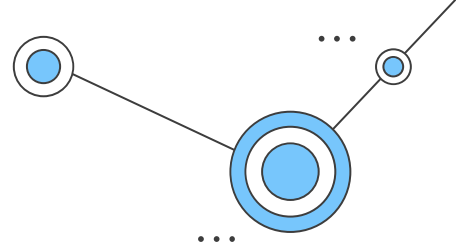
Class	Thuộc tính
overflow-visible	overflow: visible;
overflow-hidden	overflow: hidden;
overflow-scroll	overflow: scroll;
overflow-auto	overflow: auto;





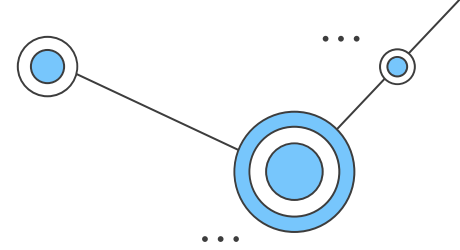
## 1.2. Position

Class	Thuộc tính
static	position: static;
fixed	position: fixed;
absolute	position: absolute;
relative	position: relative;
sticky	position: sticky;



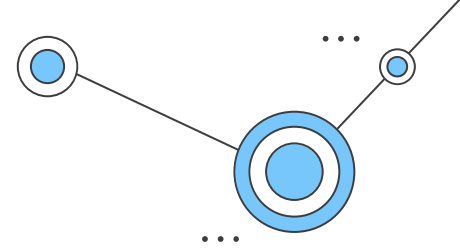
## 1.3. Top / Right / Bottom / Left

Class	Thuộc tính
top-0	top: 0px;
right-0	right: 0px;
bottom-0	bottom: 0px;
left-0	left: 0px;
top-0.5	top: 2px;
right-0.5	right: 2px;
bottom-0.5	bottom: 2px;
left-0.5	left: 2px;
top-1	top: 4px;
right-1	right: 4px;
bottom-1	bottom: 4px;
left-1	left: 4px;



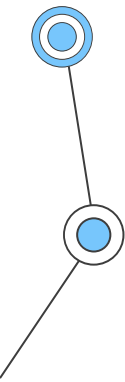
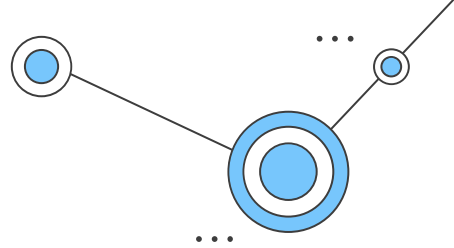
## 1.3. Top / Right / Bottom / Left

Class	Thuộc tính
top-2	top: 8px;
right-2	right: 8px;
bottom-2	bottom: 8px;
left-2	left: 8px;
...	...
top-[value]	top: value;
right-[value]	right: value;
bottom-[value]	bottom: value;
left-[value]	left: value;



## 1.4. Z-Index

Class	Thuộc tính
z-0	z-index: 0;
z-10	z-index: 10;
z-20	z-index: 20;
z-30	z-index: 30;
z-40	z-index: 40;
z-50	z-index: 50;
z-[value]	z-index: value;





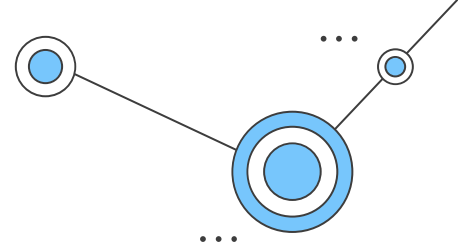
# 02

## Flexbox



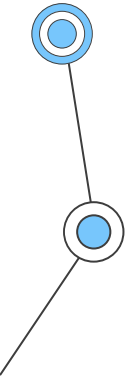
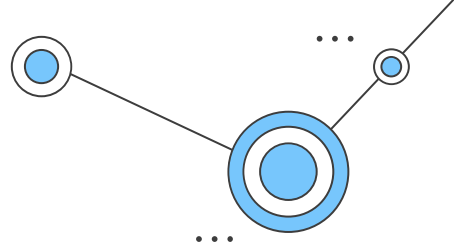
## 2.1. Flex Direction

Class	Thuộc tính
flex-row	flex-direction: row;
flex-row-reverse	flex-direction: row-reverse;
flex-col	flex-direction: column;
flex-col-reverse	flex-direction: column-reverse;



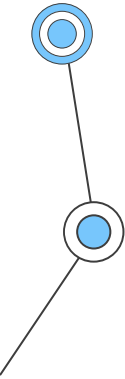
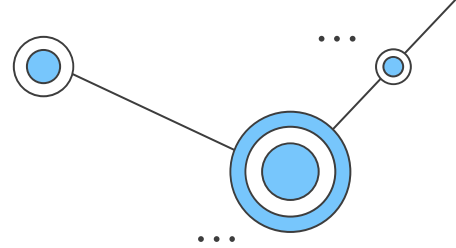
## 2.2. Flex Wrap

Class	Thuộc tính
flex-wrap	flex-wrap: wrap;
flex-wrap-reverse	flex-wrap: wrap-reverse;
flex-nowrap	flex-wrap: nowrap;



## 2.3. Order

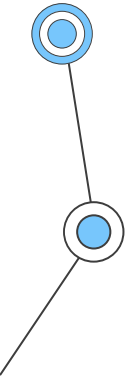
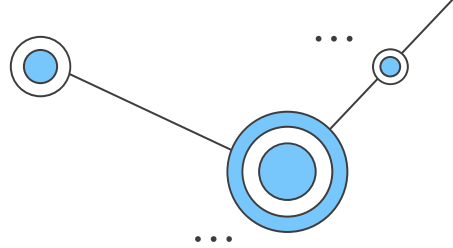
Class	Thuộc tính
order-none	order: 0;
order-1	order: 1;
order-2	order: 2;
...	...
order-11	order: 11;
order-12	order: 12;
order-first	order: -9999;
order-last	order: 9999;
order-[value]	order: value;





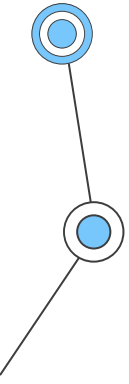
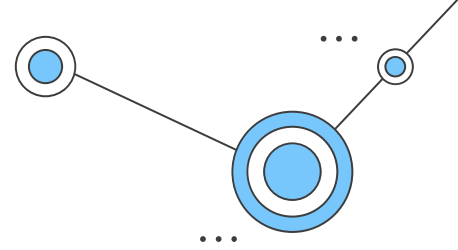
## 2.4. Justify Content

Class	Thuộc tính
justify-start	justify-content: flex-start;
justify-end	justify-content: flex-end;
justify-center	justify-content: center;
justify-between	justify-content: space-between;
justify-around	justify-content: space-around;
justify-evenly	justify-content: space-evenly;



## 2.5. Align Items

Class	Thuộc tính
items-start	align-items: flex-start;
items-end	align-items: flex-end;
items-center	align-items: center;
items-stretch	align-items: stretch;





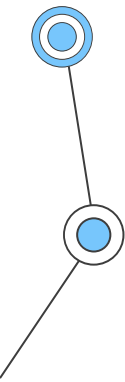
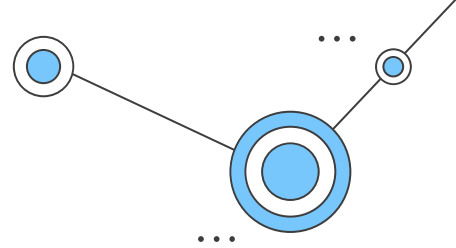
03

Grid



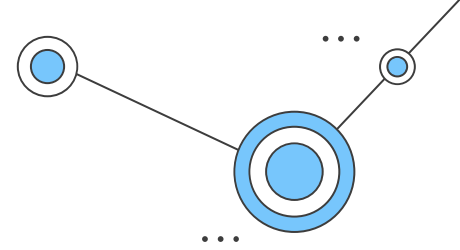
## 3.1. Grid Template Columns

Class	Thuộc tính
grid-cols-1	1 cột
grid-cols-2	2 cột
...	...
grid-cols-11	11 cột
grid-cols-12	12 cột



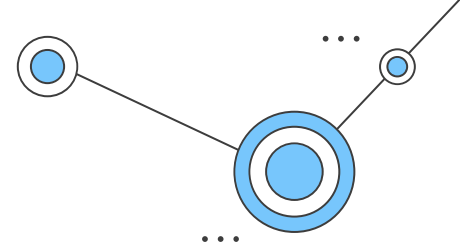
## 3.2. Gap

Class	Thuộc tính
gap-0	gap: 0px;
gap-0.5	gap: 2px;
gap-1	gap: 4px;
gap-2	gap: 8px;
...	...
gap-[value]	gap: value;



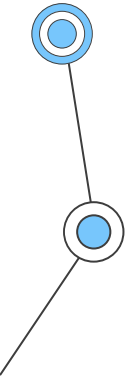
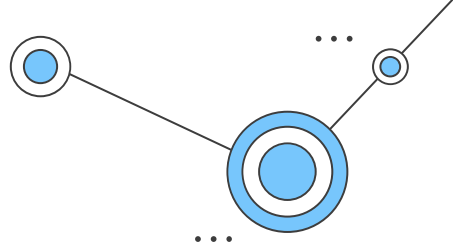
### 3.3. Grid Column Start / End

Class	Thuộc tính
col-span-1	Rộng 1 cột
col-span-2	Rộng 2 cột
...	...
col-span-11	Rộng 11 cột
col-span-12	Rộng 12 cột



### 3.4. Grid Row Start / End

Class	Thuộc tính
row-span-1	Cao 1 hàng
row-span-2	Cao 2 hàng
...	...
row-span-11	Cao 11 hàng
row-span-12	Cao 12 hàng





04

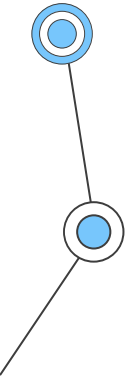
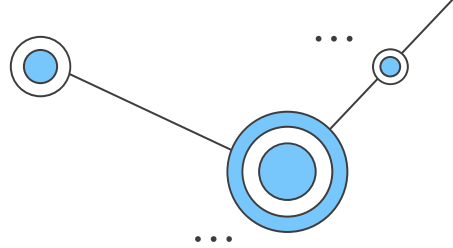
Effects





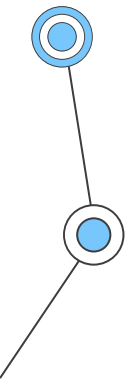
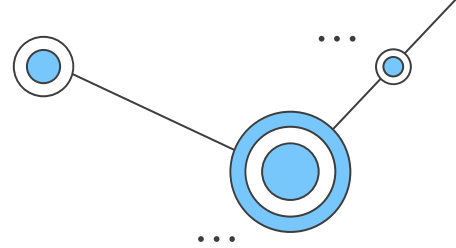
## 4.1. Box Shadow

- Tự nghiên cứu tại: <https://tailwindcss.com/docs/box-shadow>



## 4.2. Opacity

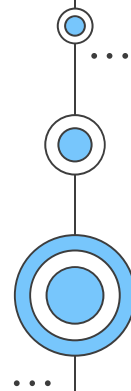
Class	Thuộc tính
opacity-0	opacity: 0;
opacity-10	opacity: 0.1;
opacity-20	opacity: 0.2;
opacity-30	opacity: 0.3;
...	...
opacity-90	opacity: 0.9;
opacity-100	opacity: 1;
opacity-[.value]	opacity: 0.value;





# 05

## Responsive Design



## 05. Responsive Design

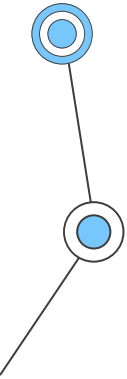
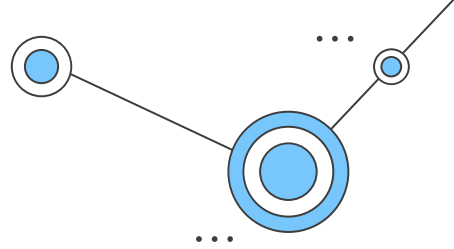
Điểm ngắt	Chiều rộng tối thiểu	CSS
sm	640px	@media (min-width: 640px) { ... }
md	768px	@media (min-width: 768px) { ... }
lg	1024px	@media (min-width: 1024px) { ... }
xl	1280px	@media (min-width: 1280px) { ... }
2xl	1536px	@media (min-width: 1536px) { ... }

# 06

## Theme Configuration (Customization)

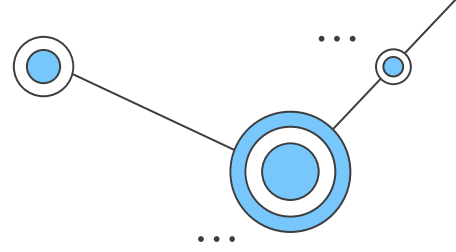
## 6.1. Screens

- *Hướng dẫn trong buổi học.*



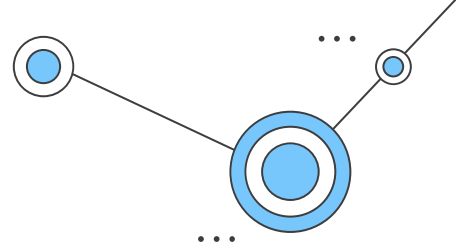
## 6.2. Colors

- *Hướng dẫn trong buổi học.*



## 6.3. Font Family

- *Hướng dẫn trong buổi học.*



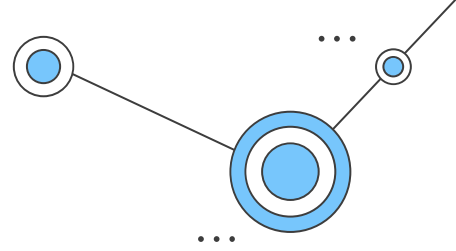


# 07

## Giới thiệu Project 3 (Sử dụng Tailwind CSS)

## 07. Giới thiệu Project 3 (Sử dụng Tailwind CSS)

- Link Figma: *Gửi trong buổi học.*

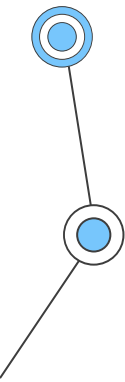
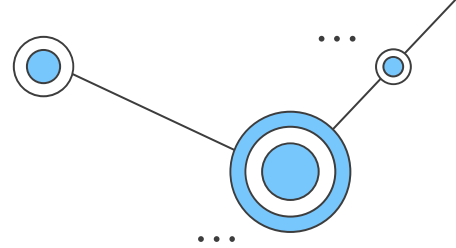


# 08

## Dựng cấu trúc thư mục

## 08. Dạng cấu trúc thư mục

- *Hướng dẫn trong buổi học.*





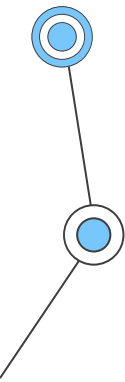
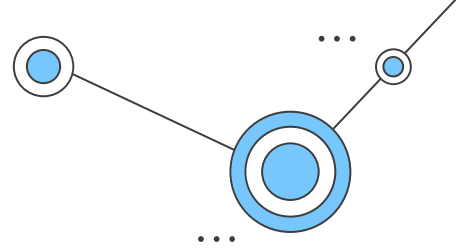
# 09

**Dựng các file base**



## 09. Dựng các file base

- *Hướng dẫn trong buổi học.*



# CÁCH HOVER THẺ CHA THÌ THẺ CON CÒ THAY ĐỔI

The image shows a web browser on the left and a code editor on the right. The browser displays a Tailwind CSS documentation page titled "Handling Hover, Focus, and Other States". It explains how to use the `group` class and `group-*` modifiers like `group-hover` to style elements based on the state of a parent element. A code snippet is shown with a `group` class and a `group-hover` modifier. The code editor on the right shows a React component `Header.tsx` using Tailwind CSS. It features a `group` class and a `group-hover` modifier. A red box highlights the `group-hover` modifier in the code. The terminal at the bottom shows the output of the development server.

Core Concepts > Handling Hover, Focus, and Other States

### Styling based on parent state (group-modifier)

When you need to style an element based on the state of some *parent* element, mark the parent with the `group` class, and use `group-*` modifiers like `group-hover` to style the target element:

Hover over the card to see both text elements change color

New project

Create a new project from a variety of starting templates.

```
<a href="#" class="group block max-w-xs mx-auto rounded-lg p-6 bg-white ring-1
<div class="flex items-center space-x-3">
  <svg class="h-6 w-6 stroke-sky-500 group-hover:stroke-white fill:none" v
  <h3 class="text-slate-900 group-hover:text-white text-sm font-semibold">Ne
</div>
<p class="text-slate-500 group-hover:text-white text-sm">Create a new projec
</a>
```

This pattern works with every pseudo-class modifier, for example `group-focus`, `group-active`, or even `group-odd`.

Differentiating nested groups

```
Header.tsx
export const Header = () => {
  <div className="bg-orange-400 flex items-center justify-between px-[40px] py-[15px]">
    <div className="">
      <Link href="/" className="text-white text-[32px] font-[700]">
        Logo
      </Link>
    </div>
    <div className="">
      <ul className="flex items-center">
        <li className="relative group">
          <Link href="/about" className="font-[500] text-white mx-[15px]">
            Giới thiệu
          </Link>
          <ul className="absolute top-[100%] left-[0] bg-orange-600 w-[250px] px-[10px] py-[15px] hidden group-hover:block">
            <li>
              <Link href="/about/general" className="font-[500] text-white mx-[15px]">
                Giới thiệu chung
              </Link>
            </li>
            <li>
              <Link href="/about/history" className="font-[500] text-white mx-[15px]">
                Lịch sử hình thành
              </Link>
            </li>
          </ul>
        </li>
      </ul>
    </div>
  </div>
```

CÁCH HOVER THẺ CHA THẺ CON THAY ĐỔI

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

node - hoc-nextjs


GET /about/history 200 in 62ms  
✓ Compiled in 272ms (883 modules)  
GET /about/history 200 in 44ms  
✓ Compiled in 269ms (883 modules)  
GET /about/history 200 in 48ms  
✓ Compiled in 370ms (883 modules)  
GET /about/history 200 in 44ms

# Grid - Dạng lưới


localhost:3000/products

Logo Giới thiệu Sản phẩm Bài viết Liên hệ Đăng nhập Đăng ký


## Trang danh sách sản phẩm




Fjallraven - Foldsack No. 1 Backpack, Fits 15 Laptops  
109.95 USD

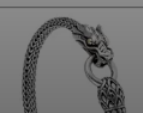


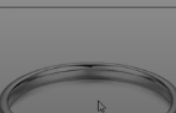
Mens Casual Premium Slim Fit T-Shirts  
22.3 USD



Mens Cotton Jacket  
55.99 USD







```
export default async function ProductPage() {
  Trang danh sách sản phẩm
  </h1>
  <div className="m-[20px] grid grid-cols-3 gap-[15px]">
    {data.map((item: any, index: number) => {
      <div key={index} className="border border-black p-[10px] rounded-[8px]">
        <img
          src={item.image}
          alt={item.title}
          className="w-full aspect-square object-contain"
        />
        <h3 className="mt-[20px] font-[600]">
          {item.title}
        </h3>
        <div className="mt-[10px] font-[700] text-red-600">
          {item.price} USD
        </div>
      </div>
    ))}
  </div>
};
```

chia dạng lưới 3 cột cách nhau 15px