

## 🔑 Interactive class

```
hover:{class}  
focus:{class}  
active:{class}  
group-hover:{class}
```

👉 Eta always **prefix + className** format e hobe.

---

### 1. Hover (mouse er upor gele style change)

```
<div class="w-40 h-40 bg-blue-400 hover:bg-blue-600 hover:scale-110  
transition"></div>
```

- Normally **blue-400**
  - Hover korle **blue-600** hobe + size barabe
- 

### 2. Focus (input/select click korle)

```
<input  
  type="text"  
  class="border border-gray-400 focus:border-blue-500 focus:ring-2  
focus:ring-blue-300 rounded p-2"  
>
```

- Normally **gray border**
  - Focus korle **blue border + ring**
- 

### 3. Active (button press korle)

```
<button class="bg-green-500 active:bg-green-700 px-4 py-2 rounded text-  
white">  
  Click Me  
</button>
```

- Normally **green-500**
  - Press kore dhore rakle **green-700**
- 

### 4. Group Hover (parent hover hole child element change)

```
<div class="group w-40 h-40 bg-gray-200 hover:bg-gray-300 flex items-center  
justify-center rounded">
```

```
<span class="opacity-0 group-hover:opacity-100 text-black">Hello Ekra
🔑</span>
</div>
```

- Box er upor hover korle child text show hobe

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## 5. Transition & Animation Combo

Interactive feel smooth korte hole always **transition** use koro:

```
<div class="w-40 h-40 bg-pink-400 hover:bg-pink-600 transition duration-300
ease-in-out"></div>
```

🔑 Column class

Link: <https://tailwindcss.com/docs/columns>

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## 🔑 Column classes (Tailwind Grid / Flex)

Tailwind e bootstrap-er moto `col-` class nei, but **grid** ba **flexbox** diye column banaite hoy.

### 1. Grid System

```
<div class="grid grid-cols-3 gap-4">
  <div class="bg-red-300 p-4">Column 1</div>
  <div class="bg-green-300 p-4">Column 2</div>
  <div class="bg-blue-300 p-4">Column 3</div>
</div>
```

👉 `grid-cols-3` → 3 column hobe.

👉 `gap-4` → column er majhe gap.

### 2. Responsive Columns

```
<div class="grid grid-cols-1 md:grid-cols-2 lg:grid-cols-4 gap-4">
  <div class="bg-pink-300 p-4">1</div>
  <div class="bg-yellow-300 p-4">2</div>
  <div class="bg-purple-300 p-4">3</div>
  <div class="bg-cyan-300 p-4">4</div>
</div>
```

- Mobile → 1 column
- Tablet (md) → 2 column
- Desktop (lg) → 4 column

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## 🔑 Responsive Images

Tailwind e image responsive korte `max-width + height auto` use korte hoy.

```

```

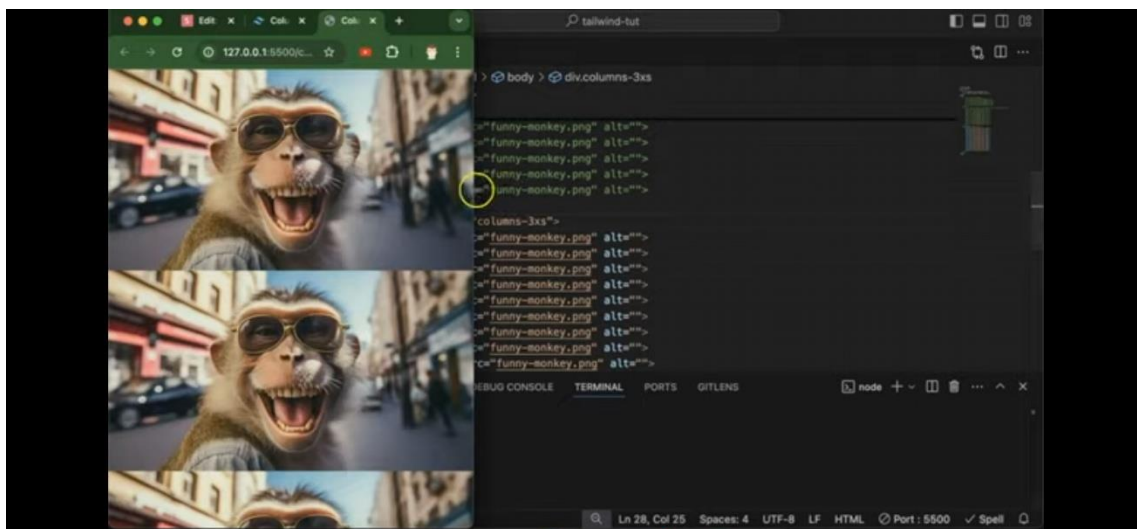
👉 Eta screen chhoto hole image shrink hobe, but quality break hobena.

---

## 🔑 Example: Responsive Image Grid

```
<div class="grid grid-cols-1 sm:grid-cols-2 md:grid-cols-3 gap-6 p-4">
  <div>
    
  </div>
  <div>
    
  </div>
  <div>
    
  </div>
</div>
```

- **Mobile:** ek line e 1 image
  - **Tablet:** ek line e 2 image
  - **Desktop:** ek line e 3 image
  - Images are fully responsive 🐼
- 



# ✳ Flexbox in Tailwind — Complete Guide

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## ◆ 1. Enable Flex

```
<div class="flex"> ... </div>
```

Makes the container a **flexbox**.

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## ◆ 2. Flex Direction

Controls whether items go **row/column**.

- `flex-row` → Default (left to right)
  - `flex-row-reverse` → Right to left
  - `flex-col` → Top to bottom
  - `flex-col-reverse` → Bottom to top
- 

## ◆ 3. Justify Content (Horizontal alignment)

```
<div class="flex justify-start">...</div>  <!-- Left -->
<div class="flex justify-center">...</div>  <!-- Center -->
<div class="flex justify-end">...</div>      <!-- Right -->
<div class="flex justify-between">...</div><!-- Space between -->
<div class="flex justify-around">...</div>  <!-- Space around -->
<div class="flex justify-evenly">...</div>  <!-- Equal spacing -->
```

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## ◆ 4. Align Items (Vertical alignment)

```
<div class="flex items-start">...</div>    <!-- Top -->
<div class="flex items-center">...</div>    <!-- Middle -->
<div class="flex items-end">...</div>        <!-- Bottom -->
<div class="flex items-stretch">...</div>    <!-- Stretch to fill -->
<div class="flex items-baseline">...</div><!-- Text baseline -->
```

---

## ◆ 5. Align Content (when wrapping on multiple rows)

```
<div class="flex flex-wrap content-start">...</div>
<div class="flex flex-wrap content-center">...</div>
```

```
<div class="flex flex-wrap content-end">...</div>
<div class="flex flex-wrap content-between">...</div>
<div class="flex flex-wrap content-around">...</div>
<div class="flex flex-wrap content-evenly">...</div>
```

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## ◆ 6. Wrap & No-Wrap

- `flex-wrap` → Items go to the next line if space ends
  - `flex-nowrap` → Items stay in one line (default)
  - `flex-wrap-reverse` → Wraps to the top instead of bottom
- 

## ◆ 7. Gap Between Items

```
<div class="flex gap-4">...</div>
```

(Instead of using margin hacks 🗑️)

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## ◆ 8. Flex Grow, Shrink, Basis

- **Grow (expand):**

```
<div class="flex-1">...</div> <!-- takes available space -->
<div class="grow">...</div> <!-- also grow -->
```

- **Don't grow:**

```
<div class="grow-0">...</div>
```

- **Shrink:**

```
<div class="shrink">...</div>
<div class="shrink-0">...</div> <!-- don't shrink -->
```

- **Flex Basis (initial size):**

```
<div class="basis-1/2">...</div> <!-- 50% width -->
<div class="basis-1/3">...</div> <!-- 33% width -->
```

---

## ◆ 9. Order

Change item order.

```
<div class="order-1">Item 1</div>
<div class="order-2">Item 2</div>
<div class="order-last">Last Item</div>
```

👉 Combine with responsive prefixes:

```
<div class="order-2 sm:order-1">Item</div>
```

---

## ◆ 10. Align Self (individual item control)

```
<div class="self-start">...</div>
<div class="self-center">...</div>
<div class="self-end">...</div>
<div class="self-stretch">...</div>
<div class="self-baseline">...</div>
```

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## ◆ 11. Flex Utilities (shorthand)

- flex-1 → flex: 1 1 0%
  - flex-auto → flex: 1 1 auto
  - flex-initial → flex: 0 1 auto
  - flex-none → flex: none
- 

## ◆ 12. Responsive Flex

Use **breakpoints**:

```
<div class="flex flex-col sm:flex-row md:justify-between lg:items-center">
  ...
</div>
```

👉 Direction & alignment **change with screen size**.

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## ✳ Interview Ready Answers

**Q: How do you center items with Tailwind Flex?**

👉 Use flex justify-center items-center.

**Q: How do you wrap items to the next line?**

👉 Use flex flex-wrap.

**Q: How do you reorder items for small screens?**

👉 Use `order-{n}` with responsive prefixes, like `sm:order-1 md:order-2`.

**Q: What's the difference between `justify-*` and `items-*`?**

👉 `justify-*` = horizontal (main axis), `items-*` = vertical (cross axis).