

# Divs, Classes & IDs

Div, class and id explained simply: div is a box, class is a group name, id is a unique name — and how CSS finds them with . and #.

## Introduction

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In the next series, CSS will paint your pages — colours, sizes, layouts. But CSS cannot style "that box over there": it finds elements by *name*. This short lesson teaches the naming system of HTML: the plain `<div>` box, the shared `class` name, and the unique `id` name. Three small ideas — and every styled page on the internet stands on them. (*Roman Urdu: CSS ko har cheez ka naam chahiye hota hai — div dabba hai, class group ka naam, id sirf aik ka naam.*)

## Key points

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- `<div>` is a **plain box** — a container that groups content together. It has no meaning of its own; we use it to divide the page into parts so we can style and arrange them.  
(*Roman Urdu: div = khaali dabba, page ko hisson mein baantne ke liye.*)
- `class` = **a group name**. Many elements can share the same class, and one element can have many classes. Example: all product boxes on a shop page have `class="product"`. Think of it like a school class: one class holds many students — and one student can also belong to the cricket team and the debate team at the same time. Groups overlap; that is normal.
- `id` = **a unique name**. Only **one** element on the whole page may have a given id. The lesson's example: **id is like a CNIC number** — one person, one number, never shared.
- Easy memory line: **div = box, class = group, id = unique**.
- Why names matter: **CSS and JavaScript find elements by these names**. In CSS: The CSS series will use this from its very first lesson. You do not need to learn CSS today — just fix the pairings in memory: **dot finds a class, hash finds an id**.
  - `.product` selects by **class** (dot = class).
  - `#price` selects by **id** (hash = id).
- Names cannot have spaces. Join words with `-` or `_`, like `class="main-heading"`.

## Code examples

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### Example 1 — Same class, one unique id

```
<div class="box">Box 1</div>
<div class="box" id="special-box">Box 2</div>
<div class="box">Box 3</div>
```

What it does: Three boxes share the group name `box` — CSS can style all three together with `.box`. The middle box also has the unique id `special-box` — CSS can pick only that one with `#special-box`.

**What you will see:** today, three plain lines of text — names do not change the look by themselves. The power appears in the CSS series: one rule for `.box` will dress all three boxes at once, and one rule for `#special-box` will single out the middle one, like one student called out of a whole class by name.

### Example 2 — One element, two classes

```
<div class="box">Box 1 – only in the box group</div>
<div class="box highlight">Box 2 – in the box group AND the highlight group</div>
```

What it does: The second div carries **two** group names, separated by one space inside the same `class` attribute. It belongs to the `box` group and to the `highlight` group at the same time.

**What you will see:** again, two plain boxes for now. But note the trap hidden here: `class="box highlight"` is **two** classes, not one class with a space in its name — this is exactly why real names join words with a dash, like `main-heading`.

### Example 3 — Reading names: who can find this div?

```
<div class="card" id="main-card">Admission Card</div>
```

What it does: One div wearing all three ideas at once: it is a **box** (`<div>`), it belongs to the **group** of all cards (`.card` in CSS), and it is the **one and only** main card (`#main-card` in CSS).

**What you will see:** a single line, "Admission Card". But three different selectors can now find it, each in its own way: `div` finds it as a box, `.card` finds it together with every other card on the page, and `#main-card` finds *only this one* — the difference between calling a whole class and calling one student by name.

## Quick recap

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- `<div>` = a plain box that groups content; it has no meaning of its own.
- `class` = a **group name**: many elements can share it, and one element can hold many classes.
- `id` = a **unique name**: one element per page, like a CNIC number — one person, one number.
- CSS finds elements by name: `.` (dot) = class, `#` (hash) = id.

- Names never contain spaces — join words with `-` or `_` (`main-heading`).

## Common mistakes

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1. **The same id on two elements** — id means unique. If many elements need the same style, that is a **class**, not an id.
2. **Spaces in names** — `class="main heading"` is actually read as *two* classes (`main` and `heading`). Use `main-heading`.
3. **Using a div where a meaning tag fits** — a top part should be `<header>`, not `<div class="header">` (Lesson 1.7). Div is for parts that have no special meaning tag.

## Practice

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1. Make a page with 4 divs: give all of them `class="card"`, and give only the third one `id="best-card"`. Write next to each (in a comment or on paper) which CSS selector — `.card` or `#best-card` — would select it.
2. Look at your Lesson 1.9 profile project (or your 1.1 page) and mark: which parts are groups (class) and which part is one-of-a-kind (id)?

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**Watch the video lesson:** <https://youtube.com/shorts/5oqvAtRQ9pc>

**Read online:** <https://toolscope.netlify.app/notes/html-div-class-id> · More free tools and notes at <https://toolscope.netlify.app>