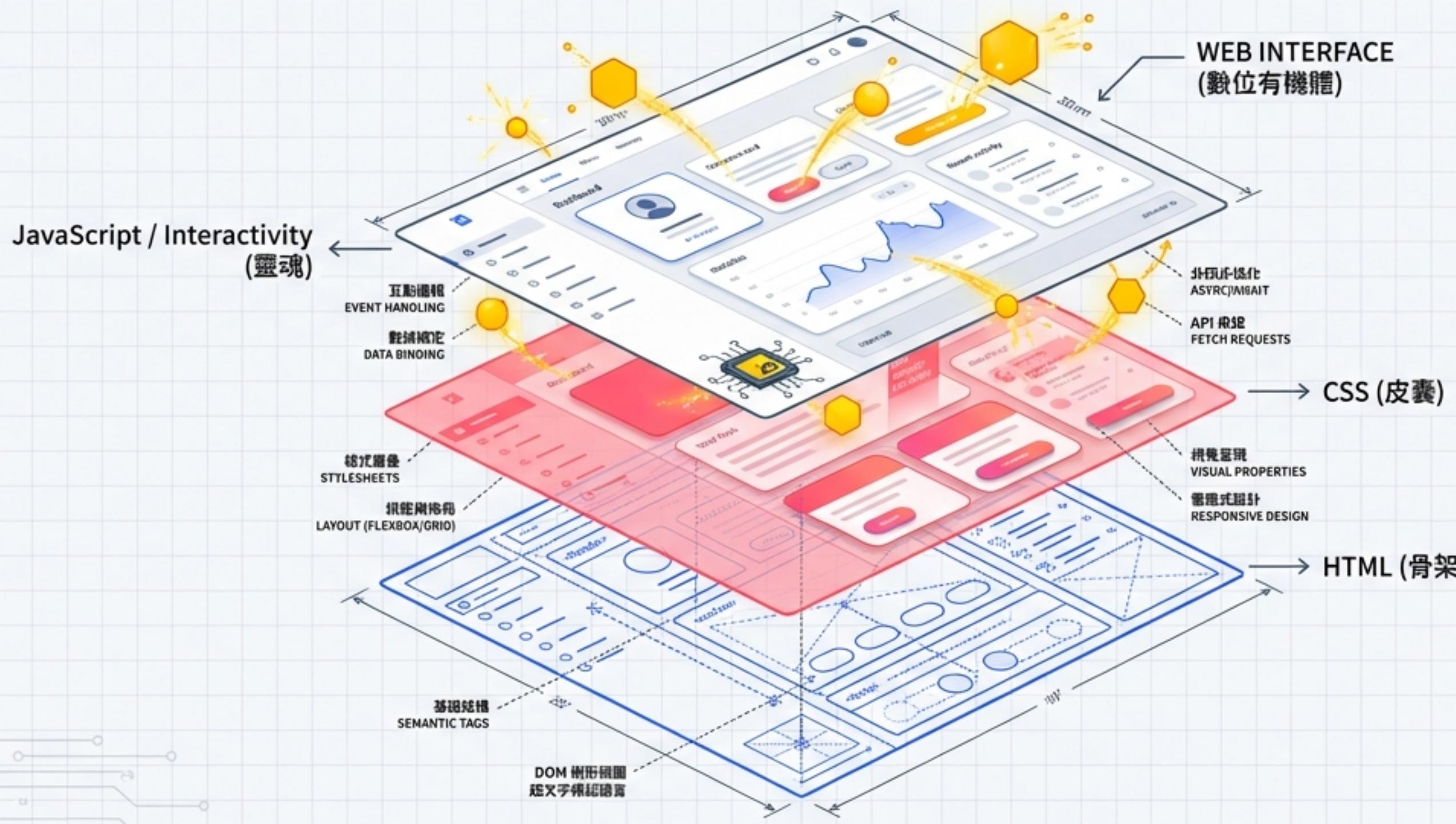


前端開發從零到一

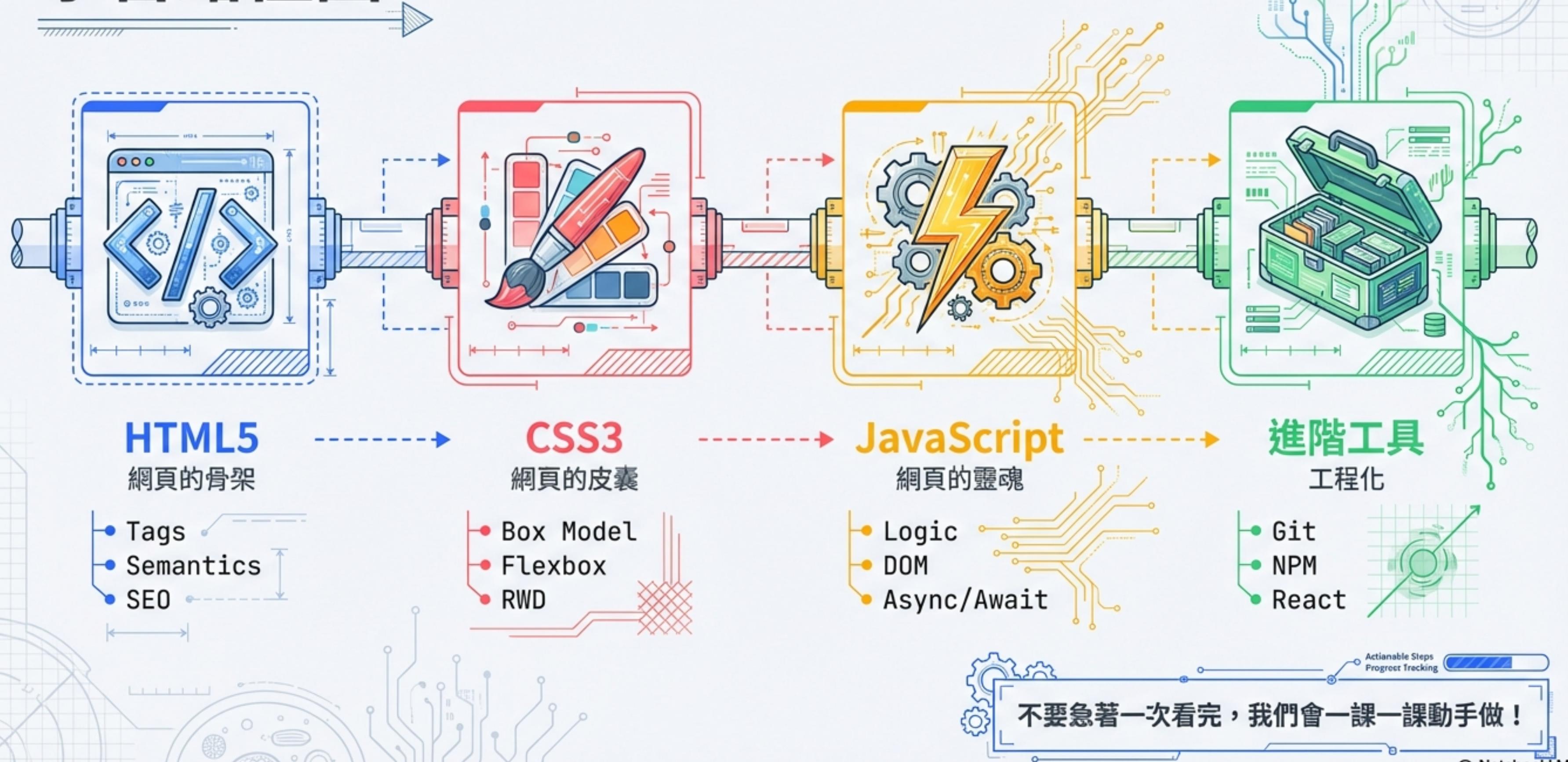
構建數位有機體：骨架、皮囊與靈魂



寫給未來的網頁工程師

BLUE = HTML (Structure)
CORAL = CSS (Style)
AMBER = JS (Interactivity)
GREY = Annotations/Blueprint

學習路徑圖



HTML 基礎結構：網頁的骨架

Modern Engineering Blueprint meets Digital Biology.

HTML 概念

HTML (HyperText Markup Language) 不是程式語言，而是標記語言。它告訴瀏覽器「內容是什麼」。

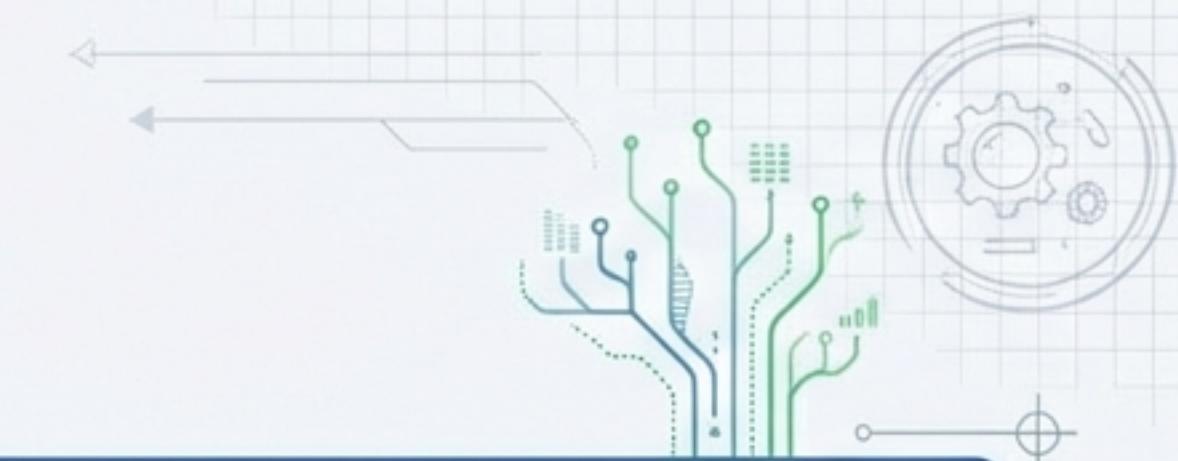


視覺化呈現



HTML 工具箱：語意化標籤

標籤 (Tags) 通常成對出現，屬性 (Attributes) 像是標籤的「名牌」。

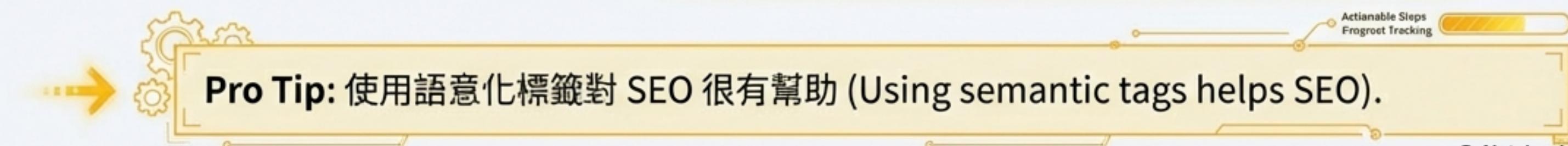


 **文字結構**
`h1-h6` (標題),
`p` (段落), `span`

 **容器**
`div` (通用), `ul/li`
(列表), `table` (表格)

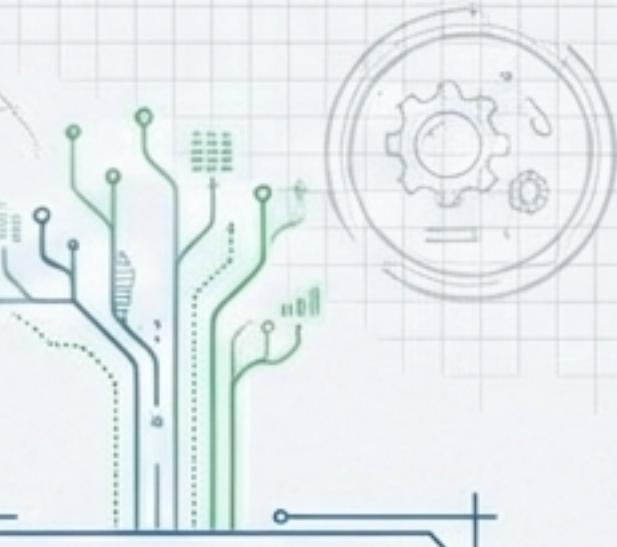
 **互動/媒體**
`input`, `button`,
`img` (src), `a` (href)

 **語意化 (SEO)**
`nav`, `main`,
`footer`, `section`



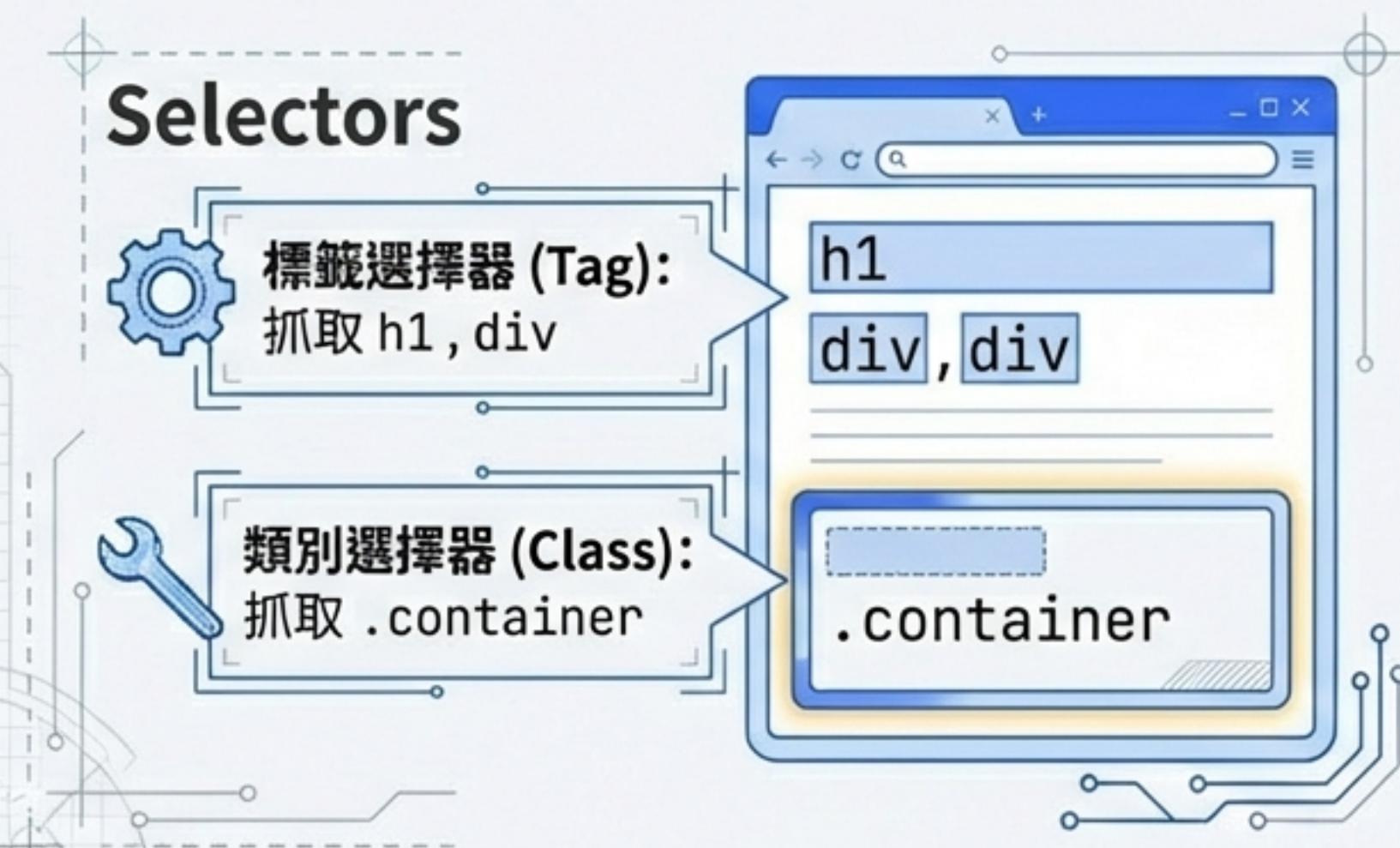
CSS 樣式美化：網頁的皮囊

Modern Engineering Blueprint meets Digital Biology.

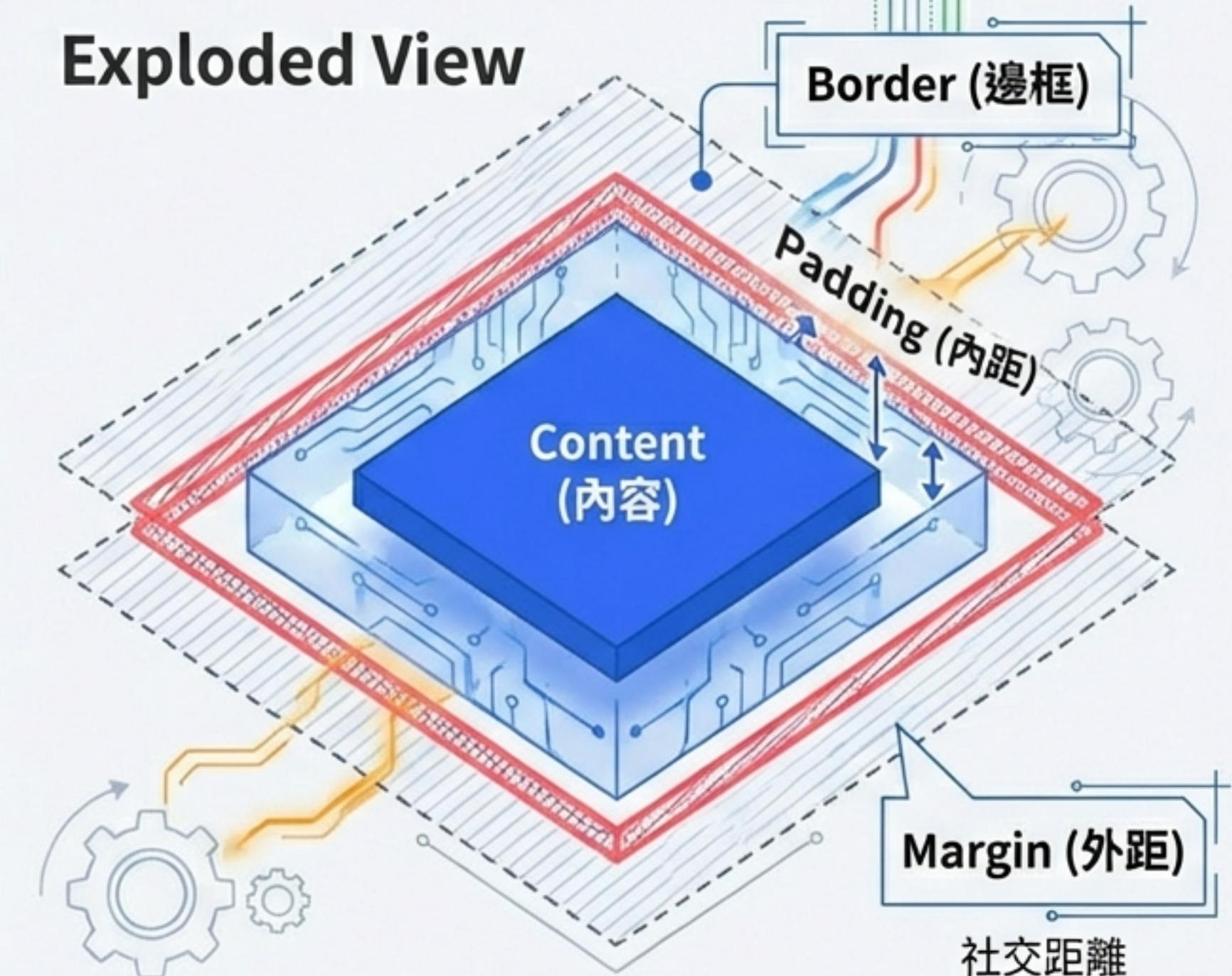


CSS 樣式美化：網頁的皮囊上色

CSS (Cascading Style Sheets) 控制視覺呈現。
我們透過「選擇器」來抓取骨架並上色。



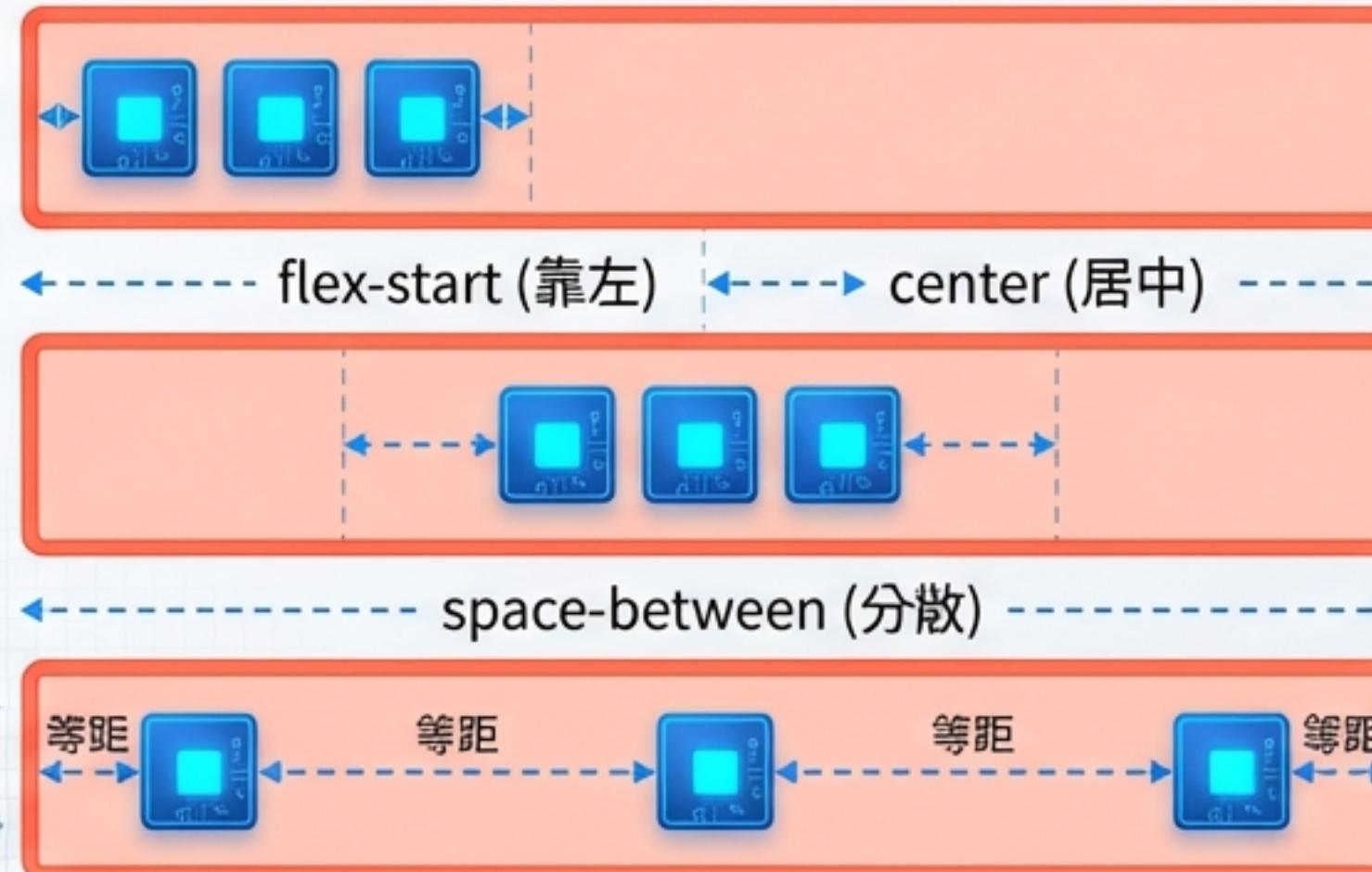
Exploded View



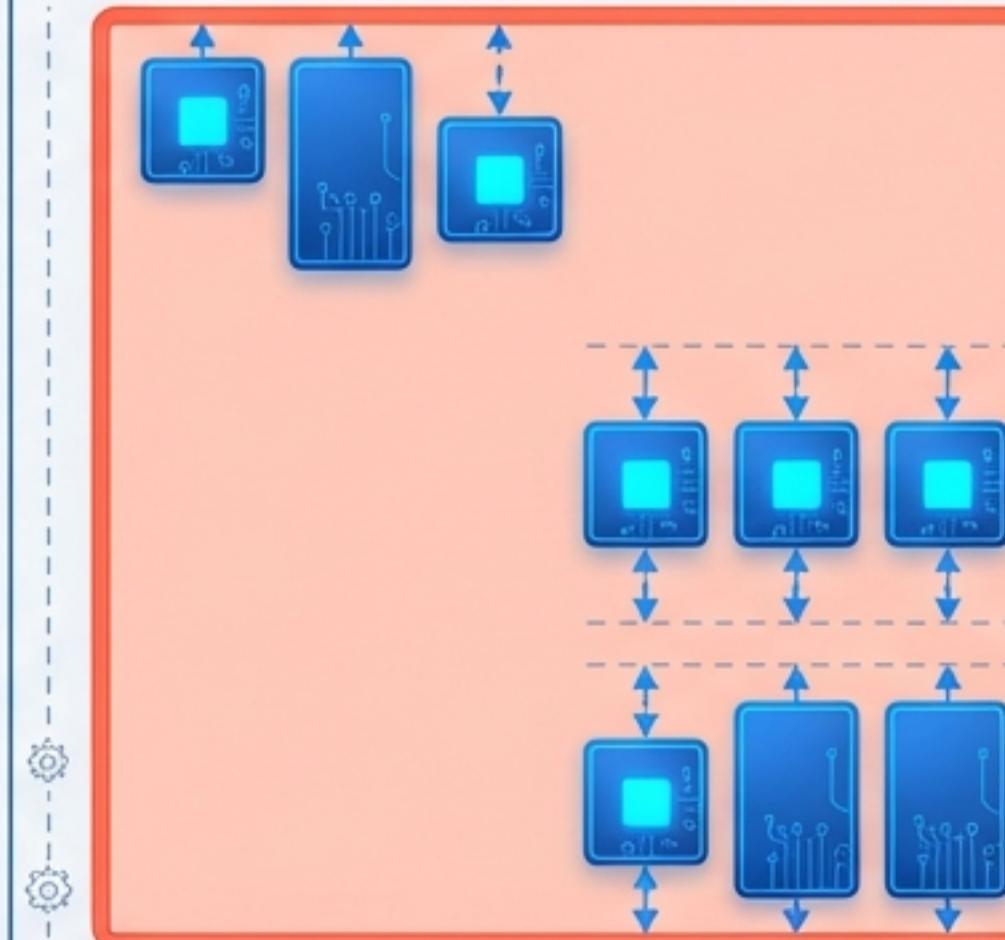
現代佈局系統：Flexbox

最強大的一維排版工具: `display: flex;`

justify-content (主軸對齊)



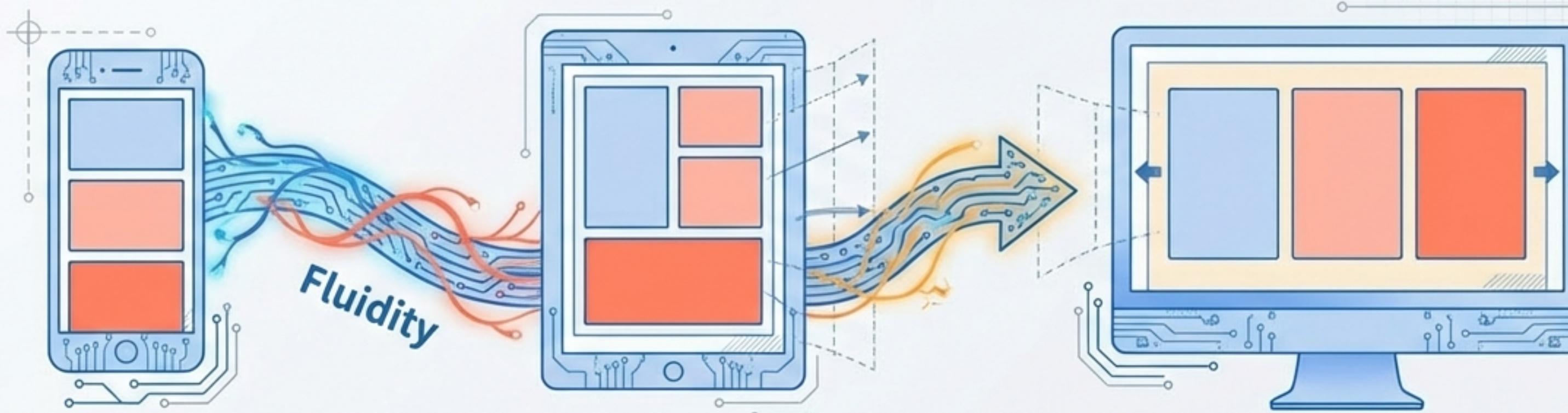
align-items (交叉軸對齊)



另有 Grid 用於二維網格排版

響應式設計 (RWD)：跨裝置相容

Modern Engineering Blueprint meets Digital Biology.



Code / Rules Section

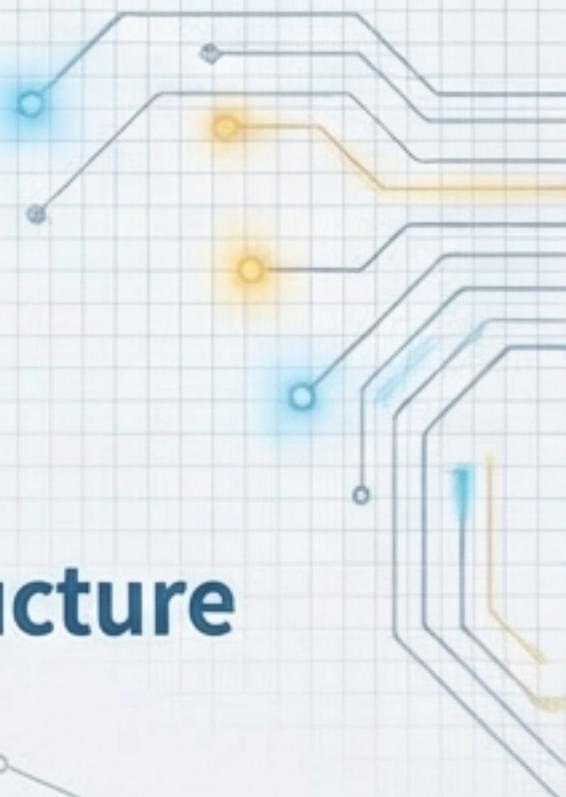
必備標籤
`<meta name="viewport" ...>`

媒體查詢
`@media (max-width: 600px) { ... }`

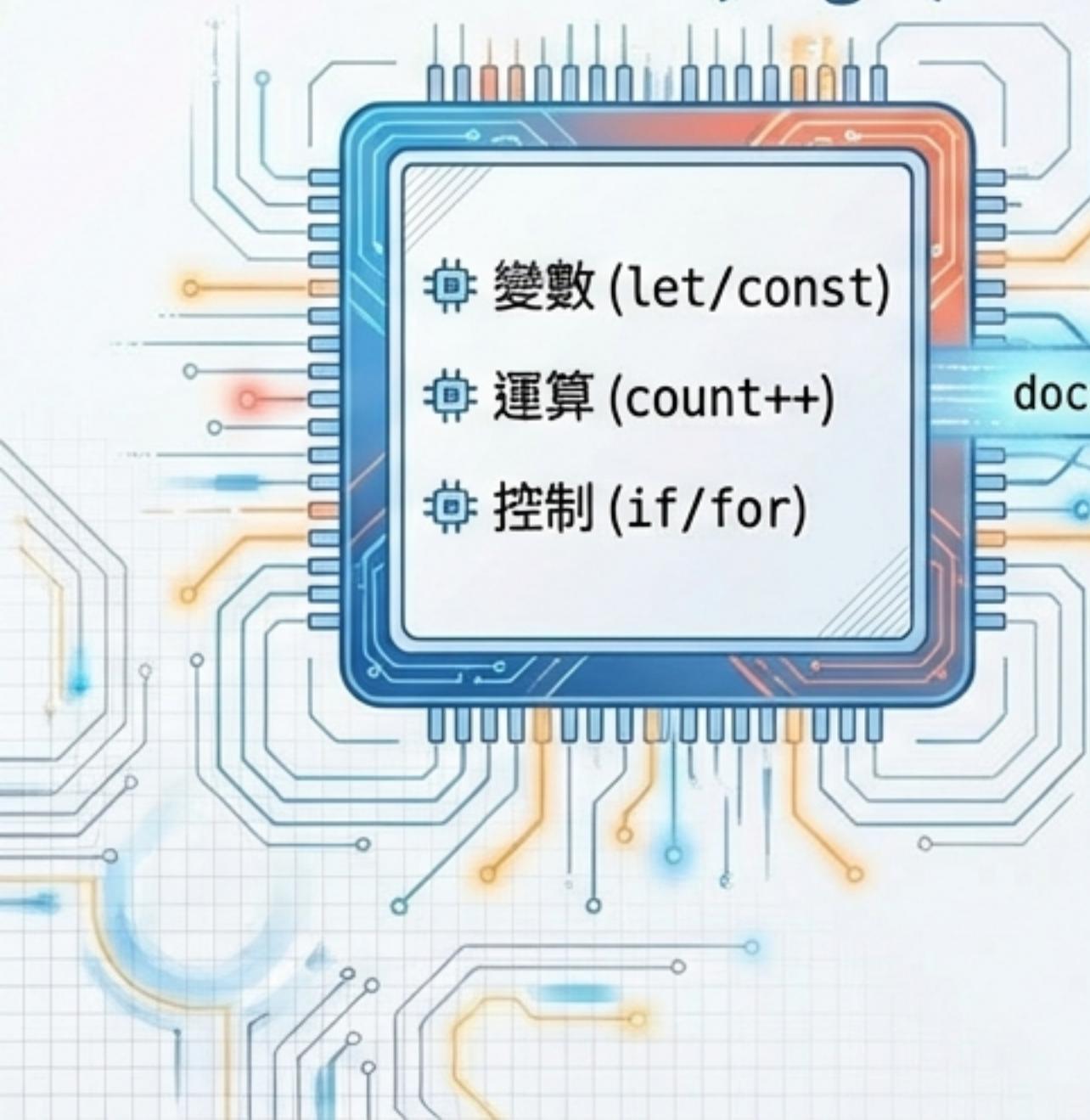
拒絕固定寬度 (No fixed width px)
使用百分比 (%)

JavaScript：賦予網頁靈魂

JS 負責處理邏輯 (Brain) 與回應行為 (Action)。



The Brain (Logic)



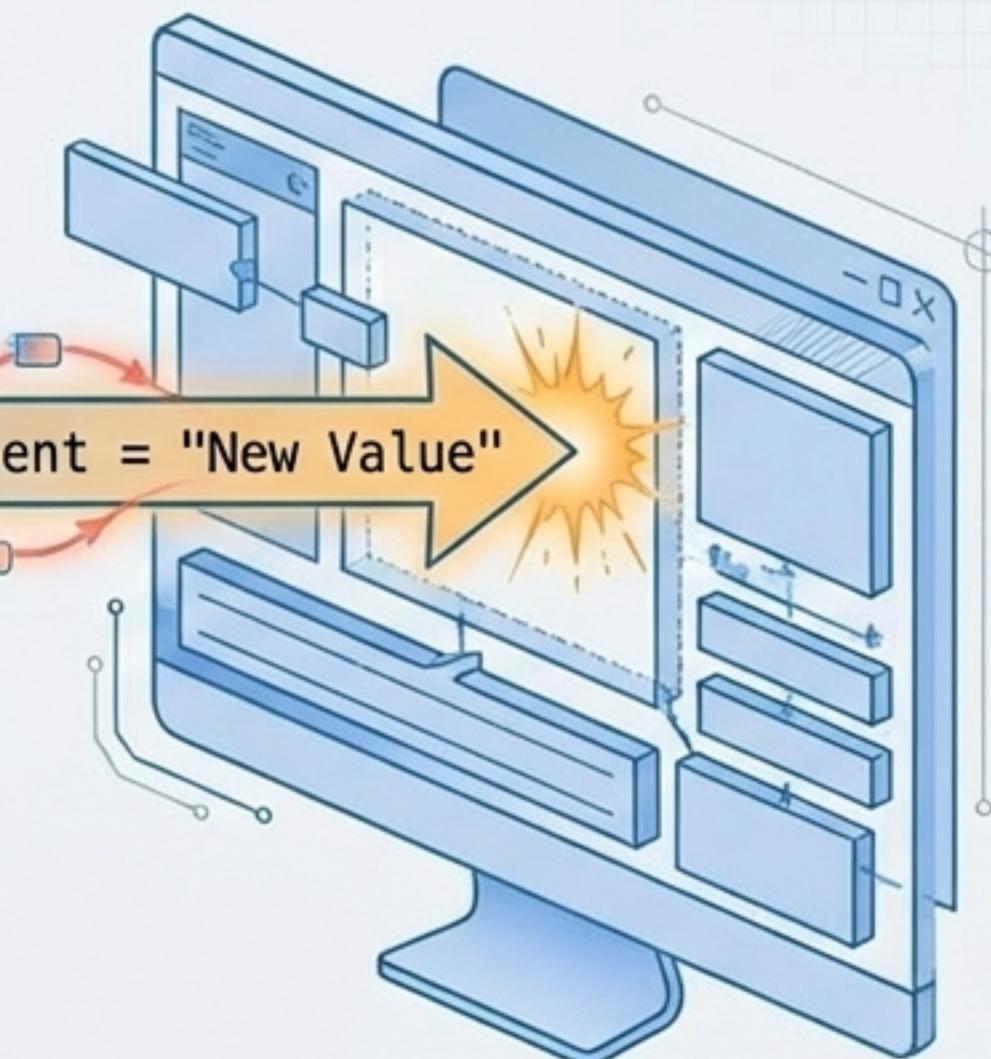
DOM (Document Object Model)

Exploded View

`document.getElementById`

`textContent = "New Value"`

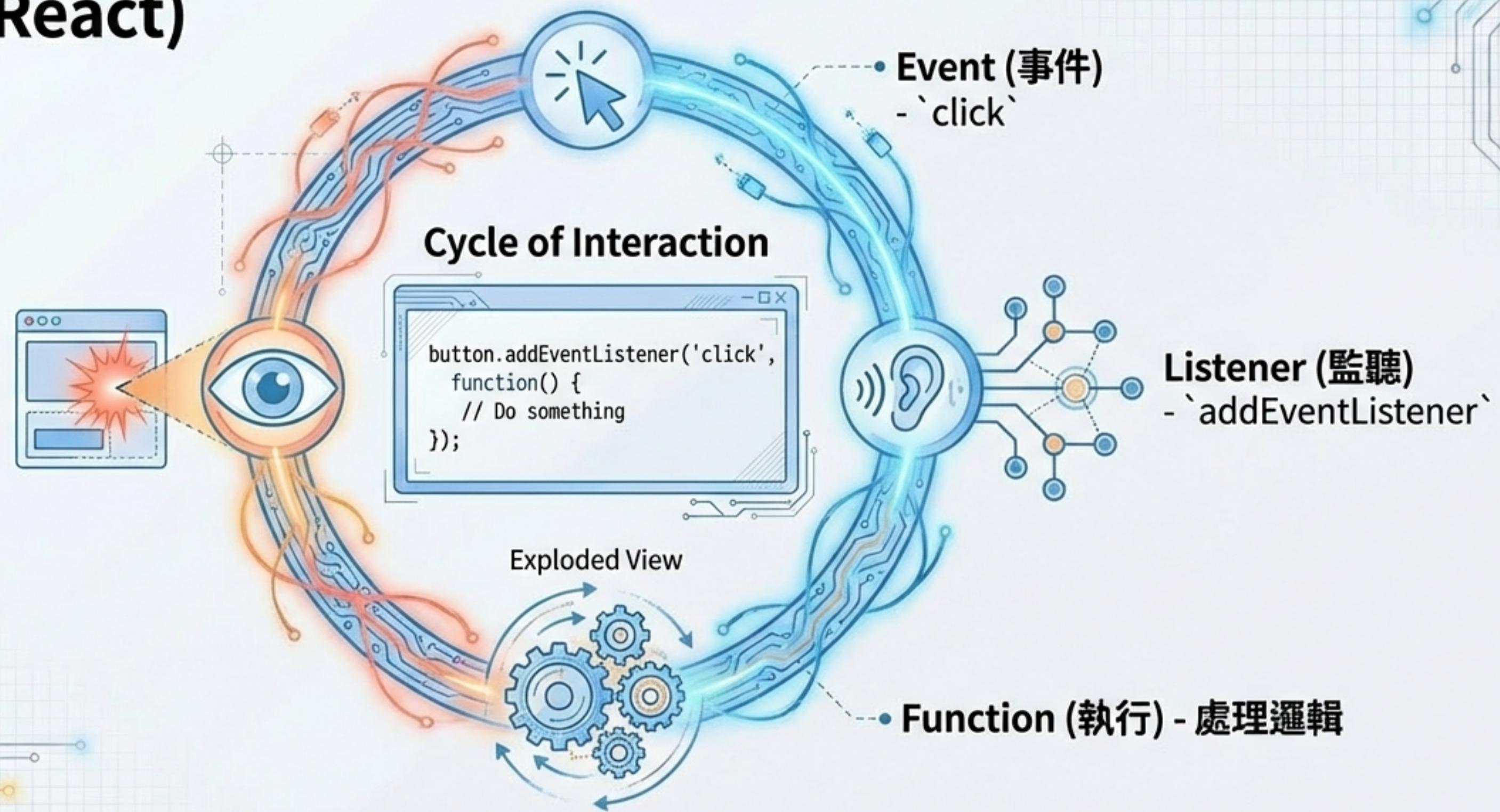
HTML Structure



互動邏輯：監聽與回應

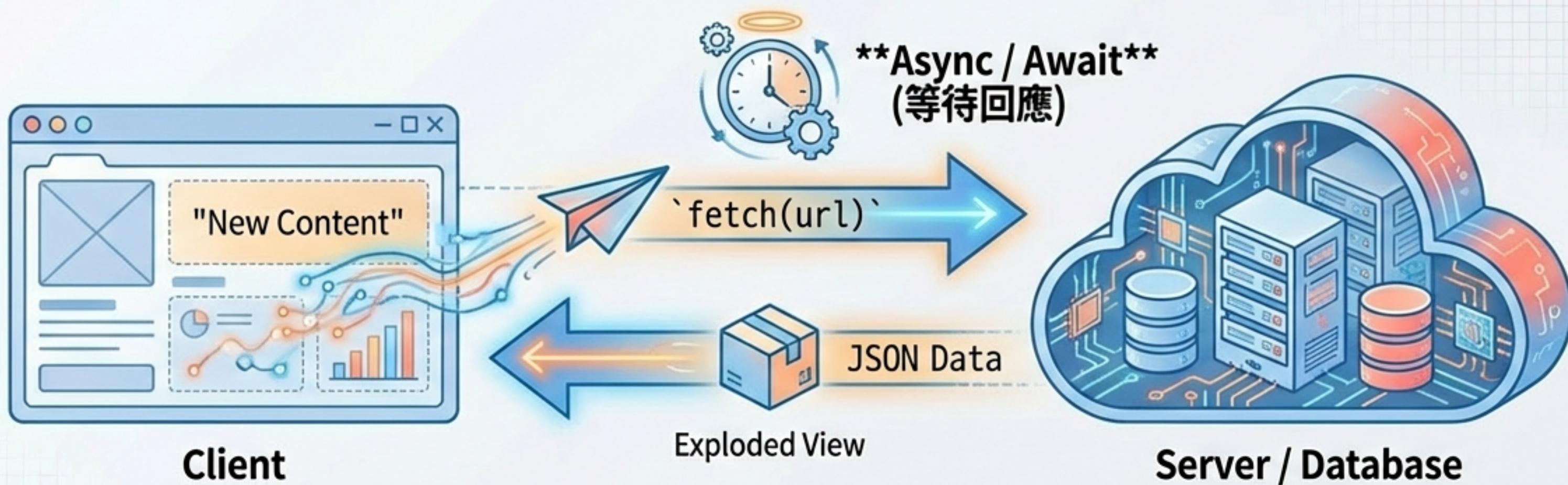
Listen & React)

Update DOM
(更新畫面)



數據聯網：Fetch API 與後端溝通

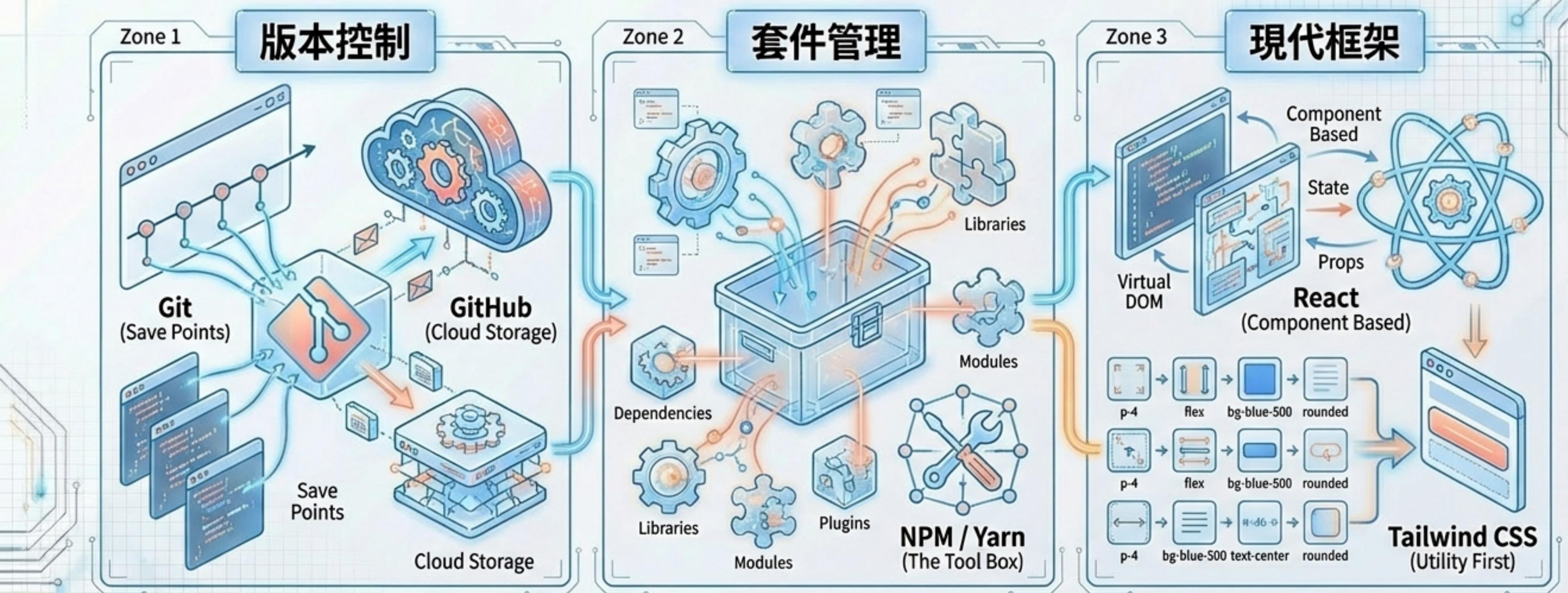
Fetch API 負責數據的獲取與後端通信 (Data Fetching & Communication)。



Key Syntax List (主要語法)

- `async function` : 定義非同步
- `await fetch(...)` : 等待資料回來
- `.json()` : 轉譯資料

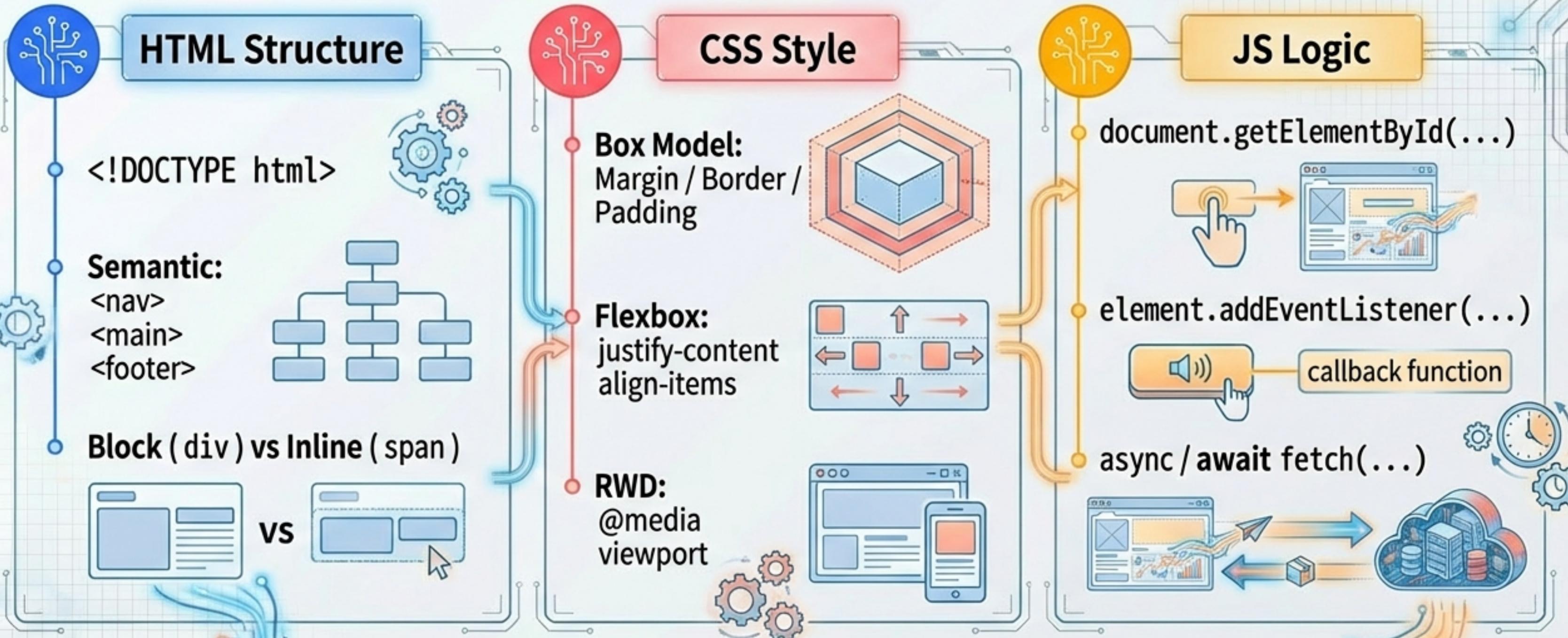
進階展望：工程師的軍火庫



這些工具能將「寫程式」提升為「軟體工程」。



重點速查表 (Cheat Sheet)



從模仿開始，動手寫下你的第一行程式碼！