

# BUILD RESPONSIVE REAL-WORLD WEBSITES WITH HTML AND CSS

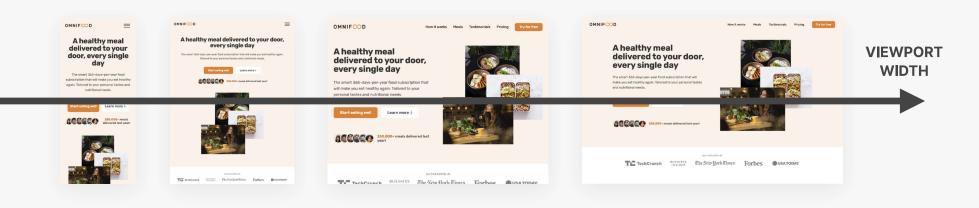




## WHAT IS RESPONSIVE DESIGN?

### **RESPONSIVE DESIGN**

- Design technique to make a webpage adjust its layout and visual style to any possible screen size (window or viewport size)
- In practice, this means that responsive design makes websites usable on all devices, such as **desktop computers**, **tablets**, **and mobile phones**.
- It's a set of practices, not a separate technology. It's all just CSS!



# RESPONSIVE DESIGN INGREDIENTS

1 FLUID LAYOUTS

- To allow webpage to adapt to the current viewport width (or even height)
- Use % (or vh / vw) unit instead of px for elements that should adapt to viewport (usually layout)
- Use max-width instead of width

**FLEXIBLE IMAGES** 

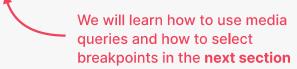
- By default, images don't scale automatically as we change the viewport, so we need to fix that
- Always use % for image dimensions, together with the max-width property

2 RESPONSIVE UNITS

- Use rem unit instead of px for most lengths
- To make it easy to scale the entire layout down (or up) automatically
- Helpful trick: setting 1rem to 10px for easy calculations

4 MEDIA QUERIES

- Bring responsive sites to life!
- To change CSS styles on certain viewport widths (called breakpoints)



# DESKTOP-FIRST VS. MOBILE-FIRST DEVELOPMENT

- Start writing CSS for the desktop: large screen
- Then, media queries shrink design to smaller screens.

**DESKTOP-FIRST** 



**MOBILE-FIRST** 

- Start writing CSS for mobile devices: small screen
- Then, media queries expand design to a large screen
- Forces us to reduce websites and apps to the absolute essentials.

We will do desktopfirst in this project. It's easier to learn!