

# Responsive and Adaptive Designs

- Not the same
- Both about page effective at different sizes
- Neither denies nor requires "gutters"
  - Some designs don't go full width
  - Essentially a max width
  - Has empty/background "gutters" on sides

# Responsive Design

- A page that uses available size
- Content wraps as needed
- HTML is naturally responsive!
  - but then we mess it up with styling

# Adaptive Design

- Changing layout at certain breakpoints
- Not automatic
- Allows for good use of space
  - Not just wrapped use of space

# How?

TL;DR: Media queries

- CSS operates off of 2+ options for layout
  - based on viewport dimensions
  - reorder elements in layout
  - collapse menus

# Simple example

Page:

- header
- menu
- content
- footer

Desktop size:

- Vertical to right of main content

Mobile size:

- Horizontal menu across top of main content

## **But Mobile!**

DevTools has many preset mobile options

- Why doesn't the mobile work?!
- Desktop resizing does!

# Mobile Cheats

- Layout viewport
  - Media query checks!
- Visual viewport
  - Allows for zoom and pan

Most mobile devices render as if a larger size

- then zoom out

Override with

```
<meta name="viewport" content="width=device-width">
```

# Summary - Responsive

- HTML is naturally **responsive**
  - Content uses available space
  - Height as needed
  - Wraps as needed
- Devs can mess it up with fixed sizes
  - Including text size assumptions
- Remember your screen isn't "normal"
  - There is no "normal"
- Remember users may have different text sizes



# Summary - Adaptive

- **Adaptive** sites change **layout**
  - At different viewport **breakpoints**
  - Often shift horizontal layout to vertical
- Implement with **media queries**
  - Often the min-width/max-width

# Summary - Setting Meta viewport

- Mobile often render with different viewport size
  - Then visually zooms in
- Can cause disconnect with media queries
- Override with:

```
<meta name="viewport" content="width=device-width">
```

- Easy to forget!
- Esp. if you don't use mobile view in DevTools
- Remember to do on assignments!