

# WEB 321

Week 7 - User Interface Design Strategies

# Topics

- Responsive Web Design
- Adaptive Design
- Adaptive vs. Responsive
- Desktop First Design
- Mobile First Design

# Responsive Design

- Based on the idea that applications should “respond” to transitions in screen sizes
- Optimized for a wide range of devices
- Elements are rearranged once “breakpoint” criterias are met
- Uses relative units
- Uses breakpoints
  - Screen sizes are measured pixels and elements are readjusted once thresholds are met

# Adaptive Design

- Based on the principle that graphical user interfaces should “adapt” to different screen sizes
- Similar to responsive design
- Content follows a fixed layout size
- Fixed layout sizes are defined
- Typically consists of 6 alternative designs
  - 320, 480, 760, 1200, and 1600

# Adaptive vs. Responsive

## Responsive

- One design
- Uses breakpoints to readjust elements
- Based on two approaches: mobile first and desktop first
- Uses relative sizes
- Cheaper to maintain

## Adaptive

- Multiple designs
- Fixed layouts for common screen widths
  - 320, 480, 760, 960, 1200, and 1600
- Uses fixed sizes
- Typically has at least 6 versions of the same screen
- Could leave some users out who do not have a “standard screen size”

# Desktop First Design

- “Top down approach”
- Designs are based on large screens
- Break points are added to support smaller screens
- Based on the idea that most users will be desktop users
- Great approach for websites and software applications

# Mobile First Design

- “Bottom-up approach”
- Designs are based on small screens
- Breakpoints are added to support larger screens
- Great for portable device development
- Based on the principle that the majority of users will visit the application through a portable device