

# Responsive Design Considerations

## Learning Expectations:

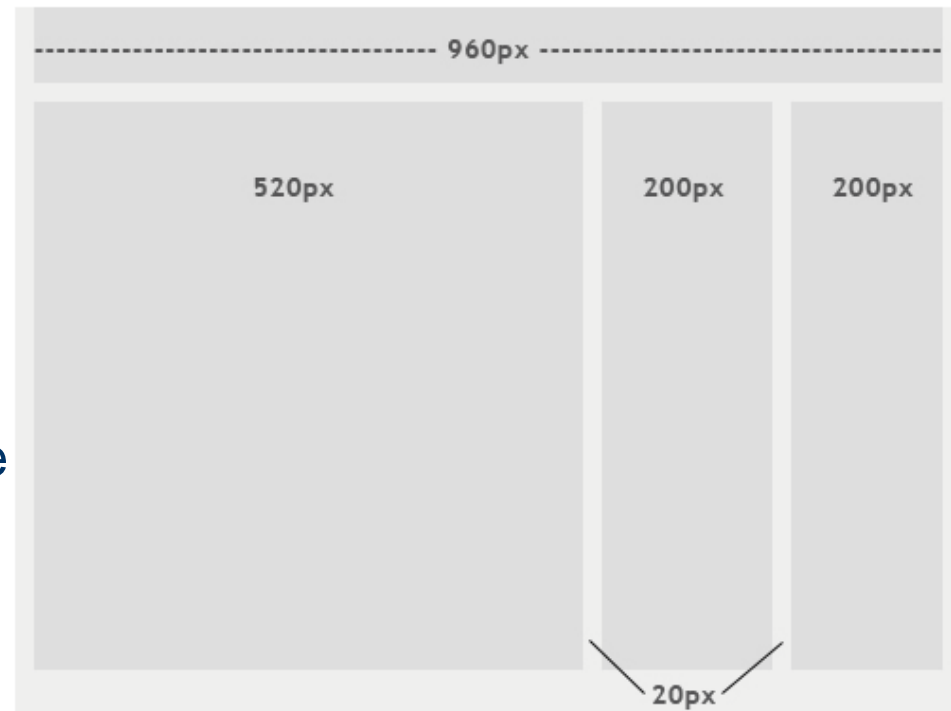
- What kind of platform will your users be using to access your site?
- Understand the difference between *fluid* and *fixed* layouts
- Gain a knowledge of key design considerations for the mobile web.

Check out <http://www.liquidapsive.com/>  
(the dropdown in top right corner)

# Fluid vs Fixed Layouts

## ◆ Fixed Layout

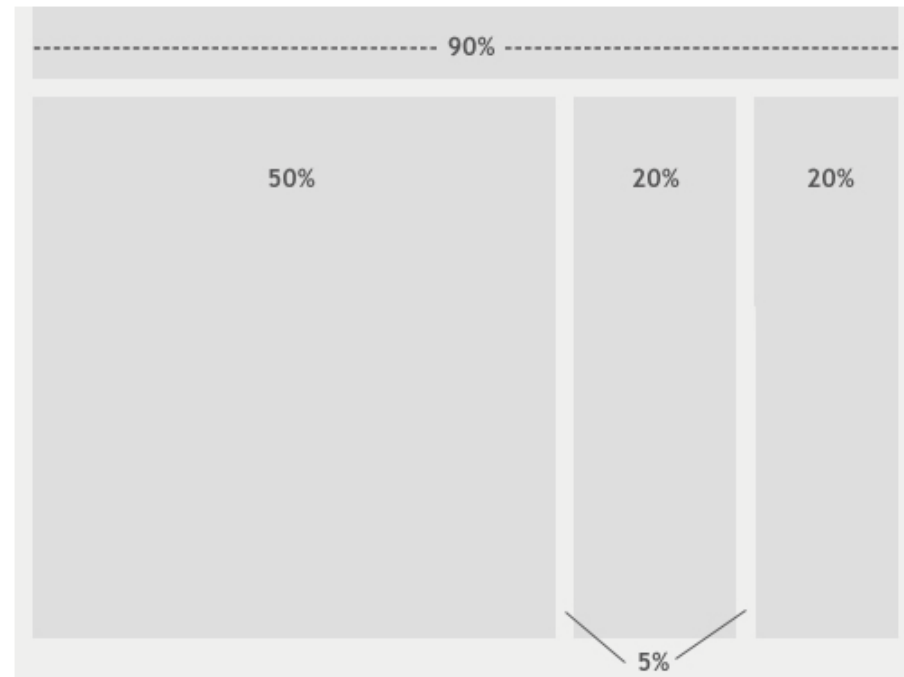
- A fixed website layout has a wrapper that is a fixed width, and the components inside it have either percentage widths or fixed widths.
- The important thing is that the container (wrapper) element is set to not move.
- No matter what screen resolution the visitor has, he or she will see the same width as other visitors.



# Fluid vs Fixed Layouts

## ◆ Fluid Layout

- In a fluid layout also referred to as a liquid layout, the majority of the components inside have percentage widths, and thus adjust to the user's screen resolution.
- The image above shows a fluid (liquid) website layout.
- While some designers may give set widths to certain elements in fluid layouts, such as margins, the layout in general uses percentage widths so that the view is adjusted for each user.



# Fluid Layouts

## ◆ The Pros

- Fluid web page design can be more user-friendly, because it adjusts to the user's set up.
- The amount of extra white space is similar between all browsers and screen resolutions, which can be more visually appealing.
- If designed well, a fluid layout can eliminate horizontal scroll bars in smaller screen resolutions.

## ◆ The Cons

- The designer has less control over what the user sees & may overlook problems because the layout looks fine on their specific screen resolution.
- Images, video and other types of content with set widths may need to be set at multiple widths to accommodate different screen resolutions.
- With incredibly large screen resolutions, a lack of content may create excess white space that can diminish aesthetic appeal.

# Fixed Layouts

## ◆ The Pros

- Fixed-width layouts are much easier to use and easier to customize in terms of design.
- Widths are the same for every browser, so there is less hassle with images, forms, video and other content that are fixed-width.
- There is no need for min-width or max-width, which isn't supported by every browser.
- Even if a site is designed to be compatible with the smallest screen resolution,  $800 \times 600$ , the content will still be wide enough at a larger resolution to be easily legible.

## ◆ The Cons

- A fixed-width layout may create excessive white space for users with larger screen resolutions, thus upsetting “divine proportion,” the “Rule of Thirds,” and other design principles.
- Smaller screen resolutions may require a horizontal scroll bar, depending the fixed layout's width.
- Seamless textures, patterns and image continuation are needed to accommodate those with larger resolutions.
- Fixed-width layouts generally have a lower overall score when it comes to usability.

# Other Design Considerations

## ◆ Above the Fold

- On a web page this is the area the visitor sees without scrolling down the page. Arrange interesting content in this area for maximum impact.
- At one of the most popular screen resolutions of 1024X768, the amount of screen viewable above the fold (after accounting for menus, controls, etc) is usually ~600 pixels.
- Avoid placing important information and navigation controls on the far right side because this area may not initially be displayed by browsers at certain screen resolutions.

# Other Design Considerations

## ♦ Adequate White Space

- The term “white space” is borrowed from the publishing industry
- Placing white (or blank,/empty) space in areas around blocks of text increases the readability of the page.
- Placing empty space around graphics helps them stand out.
- Experiment!

# Design For The Mobile Web

## ◆ Three Approaches

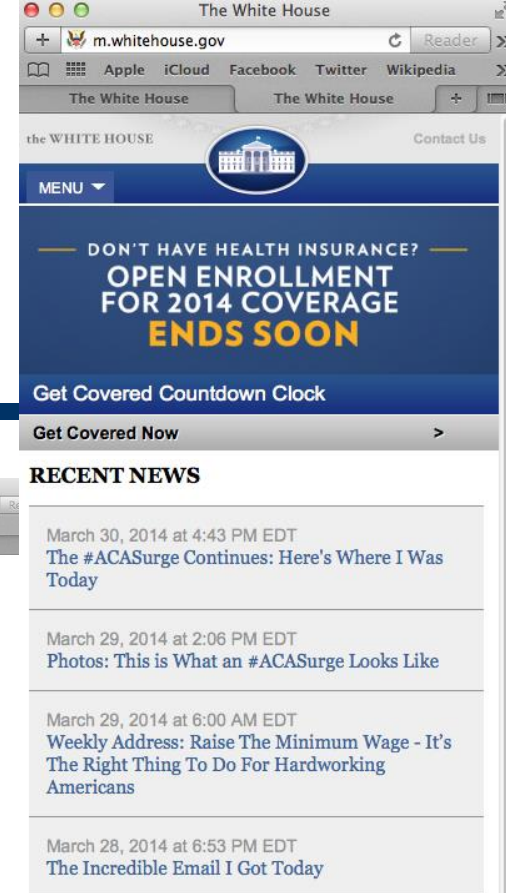
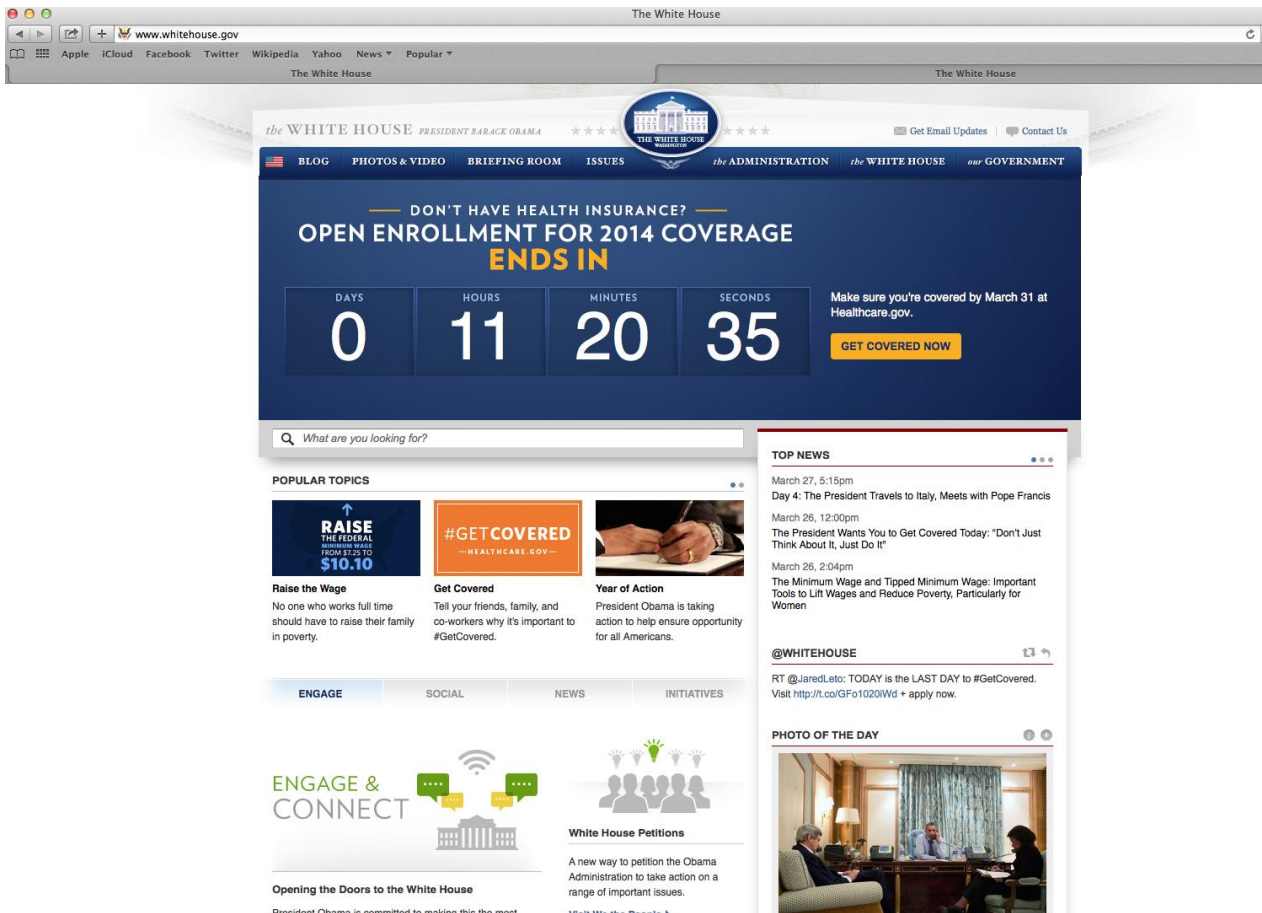
- Develop a separate mobile site with a .mobi TLD.
- Create a separate website hosted within your current domain that is targeted for mobile users.
- Apply techniques of responsive design (see further slides) by using CSS to configure your current website for display on mobile devices.

## ◆ Design Considerations

- Small screen size
- Low bandwidth/Slow connection
- Font, colour, and media issues
- Awkward controls, limited processor and memory
- Functionality



# Design For The Mobile Web



## PHOTO of the DAY



We're updating the White House privacy policy, which will go into effect on April 18. [Learn more.](#)

Search



# Responsive Web Design

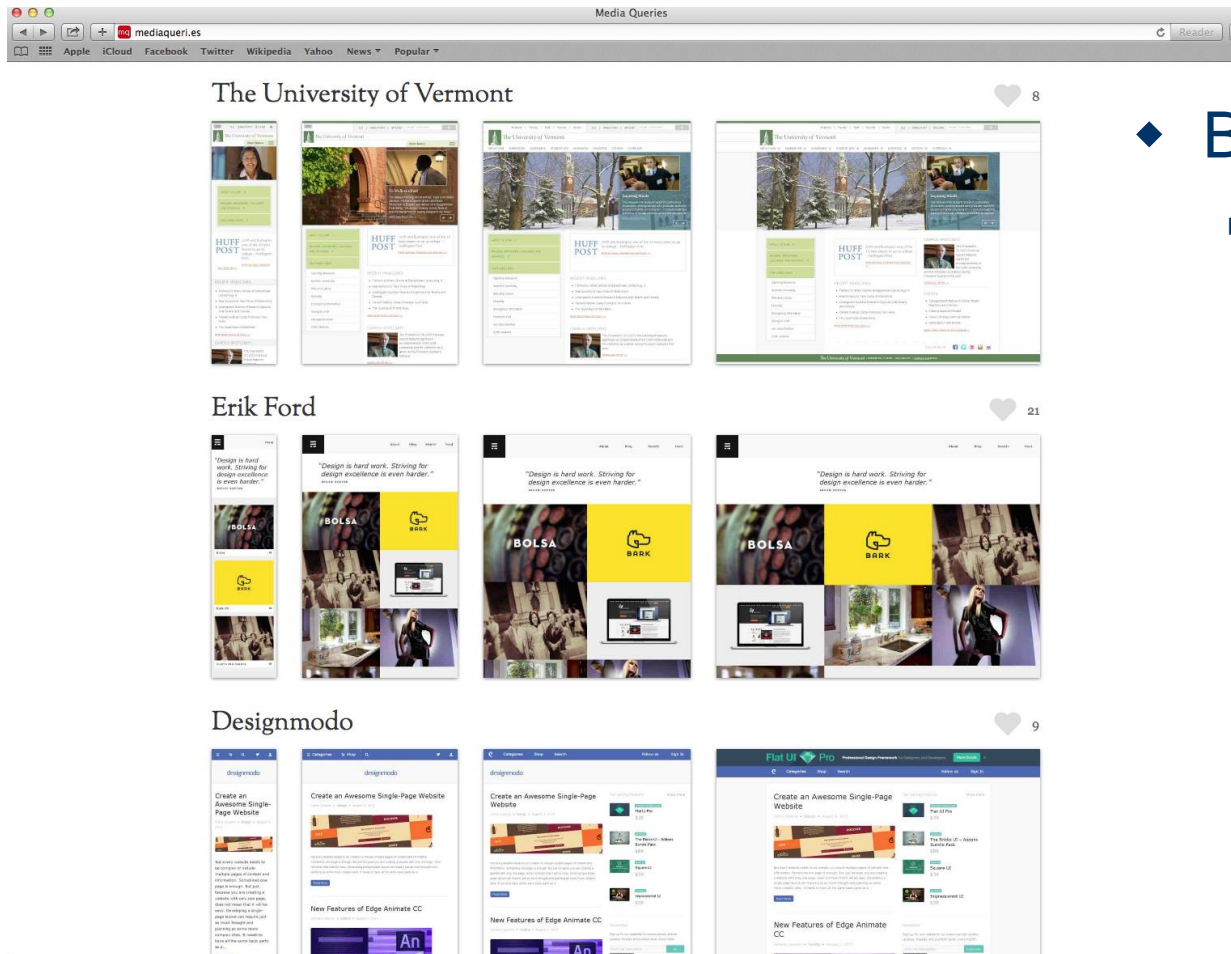
## ◆ “One Web”

- The W3C’s initiative which refers to the concept of providing a single resource that is configured for optimal display on multiple devices.

## ◆ Responsive Web Design

- A term used to describe progressively enhancing a web page for different viewing contexts (such as smartphones & tablets) through the use of coding techniques (including fluid layouts, flexible images and media queries).
- CSS *media queries* allows the presentation of content be tailored to a specific range of output devices without having to change the content itself.

# Responsive Web Design



- ◆ Basic idea:
  - Design one HTML file that is configured with CSS to render differently on a desktop, notebook, tablet, smartphone etc.