

Responsive Design

- -Sakshi Sharma
- -Himanshi Gera



What is Web Design ??

Why is it important?



- → Web design is the process of creating websites.
- → It's the presentation of content on web pages which can be accessed on a web browser.
- → Elements of Web Design:
 - **Layout:** Arrangement of ads, graphics, text, etc.
 - Color: Choice of colors. Depends on purpose and clientele.
 - ◆ Graphics: Include logos, photos, icons, etc.
 - Fonts: Enhance the design. Make text appealing and readable.
 - Content: Quality content to retain the users. SEO friendly.
- → The layout, structure and appearance of the webpage are created using HTML and CSS.
- → HTML tags define content of each page.
- → CSS defines the look and feel of the page.



Importance of Web Design

→ Attract more customers.

- → Improve the customer conversion to business.
- → Improve the brand awareness and uniformity.

Types of Web Designs



There are 4 major types of Web designs:

- 1. Static or Fixed
- 2. Fluid or Liquid
- 3. Adaptive
- 4. Responsive

Static or Fixed Design



- → Fixed web pages have a set width (in pixels) that won't alter when the browser is resized.
- → The 'container' of the website is programmed to not move.
- → The width of 960px is the most widely used size for fixed-layout websites.
- → Drawbacks:-

The content is hard to view on smaller devices due to:

- ◆ The need of scrolling horizontally.
- Or pinch and expand to zoom, etc.
- → Having a static website is a risk to lose a big part of the audience.

Fluid or Liquid Design



- → The layout here resizes as the window size is changed.
- → Fluid pages keeps the same proportions of the page regardless of the device it is open on.
- → The columns containing the content are built using percentages rather that fixed widths.
- → The columns increase or decrease in size relative to each other.
- → Drawbacks:-
 - A multi-column layout on a small screen could be too crowded for the content.
 - If the browser is very wide, some content might be stretched too far.

Adaptive Design



- → Adaptive design uses multiple fixed layouts.
- → Several versions of the layout are displayed based on the screen size of the viewer.
- → The system detects the browser size and selects the most appropriate layout through media queries
- → Such websites should load pretty fast as there are no adjustments in terms of size and position.
- → Every layout should be designed with care, and that takes time and effort which makes it expensive.



What exactly is Responsive Design ??

Why is it required?

Why??



→ Because it's Trending!

→ Mobile traffic accounts for more than half of the internet traffic.

- → So, everyone requires a mobile version of their sites. Isn't it?
- → We want our content to be like water. It should flow from one device to another. Without breaking of course!

What is Responsive Web Design?



- → A web page that "responds to" or resizes itself depending on the type of device.
- → It's like having one site that responds differently on different devices.
- → It uses both relative units and media queries, combining the ideas of a liquid layout and an adaptive layout.
- → This approach uses flexible layouts, flexible images and media queries.
- → The goal is to detect user's screen size and orientation, and change the layout accordingly.





Let's see some examples!

Example Link

Media Queries



- → Media Query is a CSS3 module that allows the content of the web page to adapt to the type of media, it is rendered in.
- → It consists of media type along with one or more expressions. The logical expressions can be true or false.
- → It uses the <a>@media rule to include a block of CSS properties only if a certain condition is true.
- → Media types:
 - all

- print

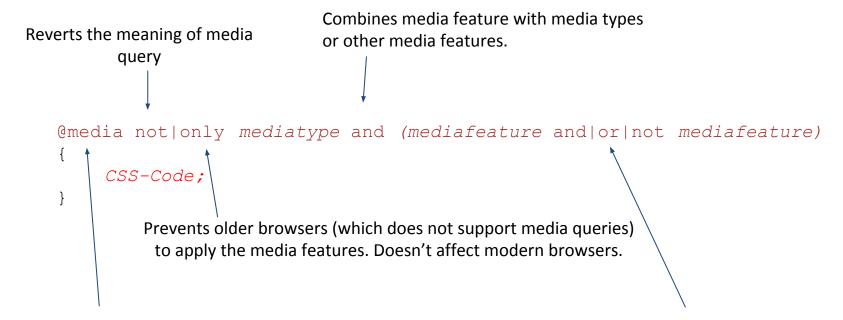
- screen

- speech

- → Used to check:
 - Width and height of viewport
 - Width and height of device
 - Orientation (landscape or portrait)
 - Resolution



Syntax



Rule used to add different styles for different media types/devices.

Comma separated. Treated like two separate media queries

Breakpoint



- → It's the point at which your sites' content will respond to provide the user with the best possible layout to consume the information.
- → Major breakpoint in web design is kept to a minimum.
- → It should be required only when the number of columns in the layout needs to change.
- → Commonly used device breakpoints:
 - ◆ 320px
 - ◆ 480px
 - **♦** 768px
 - ◆ 1024px



Exercise

Implement the given design and make it responsive.



Thank You!!!