**SONIYA KAMBLE – Assignment 6**

1. **What is media Query?**

A media query is a CSS technique used to apply styles to a webpage depending on the characteristics of the device displaying it, such as the screen size, resolution, orientation, or aspect ratio. It helps make websites responsive, meaning they can adapt to different screen sizes and provide a better user experience on devices like desktops, tablets, and smartphones.

***/\* Example: Styles for devices with a screen width of 600px or less \*/***

@media screen and (max-width: 600px) {

body {

background-color: lightblue;

}

}

In this example, if the screen width is 600 pixels or less, the background color of the webpage will change to light blue. Media queries allow developers to define different CSS rules based on the device's capabilities or characteristics. Common uses include adjusting layouts, font sizes, and hiding/showing elements.

1. **What do you mean by Responsive images?**

Responsive images refer to a technique in web development where images are adjusted dynamically to fit various screen sizes and resolutions, enhancing the user experience across different devices (like desktops, tablets, and mobile phones). The goal is to ensure that images load efficiently, without compromising on quality or performance.

***Example:***

***1. srcset Attribute***

The srcset attribute allows a webpage to specify different image files for different screen sizes or pixel densities. The browser chooses the most appropriate image based on the device’s screen size or resolution.

<img src="small.jpg"

srcset="small.jpg 500w, medium.jpg 1000w, large.jpg 2000w"

alt="A responsive image" />

**In this example:**

* small.jpg is shown for screens that are 500 pixels wide.
* medium.jpg is displayed for screens up to 1000 pixels wide.
* large.jpg is for screens up to 2000 pixels wide.

The browser picks the image that best fits the screen.

***2. <picture> Element***

The <picture> element offers even more control by allowing the use of multiple sources based on different media conditions (like screen width, resolution, or orientation).

<picture>

<source media="(max-width: 600px)" srcset="small.jpg">

<source media="(max-width: 1200px)" srcset="medium.jpg">

<img src="large.jpg" alt="A responsive image">

</picture>

**Here:**

* small.jpg is shown on screens 600 pixels or less.
* medium.jpg is used for screens up to 1200 pixels wide.
* If no condition is met, large.jpg is displayed by default.

***3. CSS max-width and width Properties***

By setting the CSS properties, images can automatically resize to fit the container.

***Example:***

img {

max-width: 100%;

height: auto;

}

This ensures that the image will scale down to fit within its container without losing its aspect ratio.

1. **Create a webpage with responsive image.Above 700px screen width it has a image and once screen size goes below 700px image get changes to another image.**

* Index.html code

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Responsive image</title>

</head>

<body>

<style>

\* {

margin: 0;

padding: 0;

box-sizing: border-box;

}

/\* Default background image \*/

body {

background-image: url('headphone\_colored.png');

background-size: cover;

background-position: center;

background-repeat: no-repeat;

background-attachment: fixed;

overflow: hidden;

margin: 0;

}

/\* Media query for screen widths less than 700px \*/

@media screen and (max-width: 700px) {

body {

background-image: url('headphone.png');

background-size: cover;

background-position: center;

background-repeat: no-repeat;

background-attachment: fixed;

}

}

</style>

</body>

</html>

* Output



