**CREATE RESPONSIVE WEB PAGES USING FLOAT, FLEX PROPERTIES AND MEDIA QUERIES**

**OBJECTIVE**

To be familiarize with float, flex properties, media queries.

**THEORY:**

**Float Properties**

CSS float properties specifies how an element should float. CSS clear property specifies what elements can float beside the cleared element and on which side. It can have on of the value :- left, right, none & inherit.

**Flex Properties**

In case of flex, it is parent box CSS where in parent box CSS, we include display: flex; and use flex other properties. We need not need to use clear both in footer section as flex itself manage its flex right and left column length.

**Responsive web design**

Responsive web design makes web page look good on all devices such as desktops, tablets and phones. Responsive web design is an approach to web design that makes web pages render well on a variety of devices and window or screen sizes.

We use media queries for responsive design. We include <meta name="viewport" content="width=device-width, initial-scale=1.0"> in head section and in CSS file after our CSS design for tablet and mobile screen, we use this format:

@media screen and (min-width: 500px) and (max-width: 800px {

tag/id/class {

//CSS code here}

}

**ACTIVITIES:**

First, we created a normal skeleton page with html using header, section, div, footer, nav. Then we created a stylesheet file to style the webpage. After linking css file to the html, then we give other decorations or styling factors such as color, size, width, height, list-style, hover-color, margin, padding, text-align.

After that, we play with the float properties by giving different value (left, right, inherit). Then we added the flex properties to make more attractive. To make it responsive we finally write a media query for screen with max width of 600px.

**CODE:**

**HTML code**

<!DOCTYPE html>

<html>

<head>

<title>Responsive</title>

<link rel="stylesheet" type="text/css" href="lab2.css">

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

</head>

<body>

<header>

Header

</header>

<nav>

<ul>

<li><a href="#">Home</a></li>

<li><a href="#">Blog</a></li>

<li><a href="#">About</a></li>

<li><a href="#">Services</a></li>

<li><a href="#">About Us</a></li>

</ul>

</nav>

<section>

<div class="left-column">

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

</div>

<div class="right-column">

<p>Right</p>

</div>

</section>

<footer>

Footer

</footer>

</body>

</html>

**CSS code:**

body {

.left-column{

width: 77% ;

padding: 1%;

background-color: lightgreen;

}

.right-column{

width:15% ;

padding: 1%;

background-color: lightblue;

color: blue;

text-align: center;

}

/\* responsive media queries\*/

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

header,footer{

padding: 5%;

}

nav ul{

flex-direction: column;

}

nav ul li a{

padding: 2%;

text-align: center;

width: 96%;

}

section{

flex-direction: column;

}

.left-column, .right-column{

width: 96%;

padding: 2%;

margin: 2px;

}

}

margin: 0;

}

header, footer{

padding: 2%;

text-align: center;

background-color: #889;

font-weight: 45px;

}

body ul{

margin: 0;

padding: 0;

}

nav{

background-color: lightblue;

}

nav ul{

display: flex;

}

nav ul li{

list-style-type: none;

margin: 0.5% 1%;

}

nav ul li a{

display: block;

text-decoration: none;

width: 100%;

padding: 7px;

background-color: orange;

}

nav ul li a:hover{

background-color: yellow;

}

section{

display: flex;

flex-direction: row-reverse;

justify-content: space-evenly;

padding: 1% 0 1% 0;

height: 400px;

}

**SUMMARY/PROBLEM FACED**

Finally we created a responsive web page with the use of media query. We also use the Css properties of float and flex.

The main problem here was to give a new code for the small device i.e width, padding, margin etc.

**LAB INSTRUCTOR COMMENTS**