EXPERIMENT #3 RESPONSIVE WEBPAGE USING HTML5 AND CSS3

Objective:

To develop a webpage using HTML5 tags and apply styles to the webpage using CSS3 properties and layouts like Normal flow and multicolumn layout.

Description:

- CSS is used to , including the design, layout and variations in display for different devices and screen sizes.
- CSS provides a set of styling properties and values. These properties can be applied the HTML tags using predefined CSS rules.

Adding CSS in HTML program

```
<br/><br/><h1>Welcome to My Page</h1><br/>This is an entertainment website</body></html>
```

Basic CSS Selector

- The CSS element Selector
 - o Element or tag name
- The CSS id Selector
 - o id attribute in html, # symbol to access in css
- The CSS class Selector
 - o class attribute in html, .(dot) symbol to access in css
- The CSS Universal(*) Selector
 - Select all the elements or tags.

Formatting Text

• The color property is used to set the color of a text.

color: green;

• The letter-spacing property is used to add or subtract space between the letters that make up a word.

letter-spacing:5px

• The text-align property is used to align the text of a document. The possible values are left, right, center, justify.

text-align:right

• The text-decoration property is used to underline, overline, and strikethrough text. The possible values are none, underline, overline, line-through, blink.

text-decoration:underline

Font

• The font-family property is used to change the face of a font.

font-family:georgia, garamond, serif

• The font-style property is used to make a font italic or oblique. The possible values are normal, italic and oblique.

font-style:italic;

• The font-weight property is used to increase or decrease how bold or light a font appears. The possible values could be normal, bold, bolder, lighter, 100, 200, 300, 400, 500, 600, 700, 800, 900 etc.

font-weight:bolder

• The font-size property is used to increase or decrease the size of a font. The possible values could be xx-small, x-small, small, medium, large, x-large, xx-large, smaller, larger, size in pixels or in %.

font-size:20px;

Setting Height & Width

The height and width properties are used to set the height and width of an element. The height and width can be set to auto or be specified in length values, like px, cm, etc., or in percent (%) of the containing block.

```
Height:200px; width: 50%;
```

Background

The CSS background properties are used to define the background effects for elements.

- The background-color property specifies the background color of an element. background-color: lightblue;
- The background-image property specifies an image to use as the background of an element. background-image: url("paper.gif");
- Showing the background image only once is also specified by the background-repeat property: background-repeat: no-repeat

CSS Box Model

- Every CSS box is divided into regions, consisting of:
 - Content
 - Text & web page elements in the container
 - Padding
 - Space between the content and the border
 - o Border
 - Space between the padding and the margin
 - Margins
 - Empty space between the element and adjacent elements

Margins

The margin property defines the space around an HTML element. It is possible to use negative values to overlap content. The values of the margin property are not inherited by the child elements. The following properties are used to set an element margin.

- The margin specifies a shorthand property for setting the margin properties in one declaration.
- The margin-bottom specifies the bottom margin of an element.
- The margin-top specifies the top margin of an element.
- The margin-left specifies the left margin of an element.
- The margin-right specifies the right margin of an element.

```
p {
  margin-top: 100px;
  margin-bottom: 100px;
  margin-right: 150px;
  margin-left: 80px;
}
```

Padding

The padding property allows you to specify how much space should appear between the content of an element and its border. The value of this attribute should be either a length, a percentage, or the word inherit. If the value is inherit, it will have the same padding as its parent element. If a percentage is used, the percentage is of the containing box.

• The padding-bottom specifies the bottom padding of an element.

padding-bottom: 15px

• The padding-top specifies the top padding of an element.

padding-top: 15px

• The padding-left specifies the left padding of an element.

padding-left: 15px

• The padding-right specifies the right padding of an element.

padding-right: 15px

Display

Changing an inline element to a block element, or vice versa, can be useful for making the page look a specific way, and still follow the web standards.

display: inline; display: block; display: inline-block

float property

The float property is used for positioning and formatting content or blocks.

The float property can have one of the following values:

left - The element floats to the left of its container

right- The element floats to the right of its container

none - The element does not float (will be displayed just where it occurs in the text). This is default

Question (Design a Web Page as given below with your own content and images)

Karunya Institute of Technology and Sciences



About Us

Karunya Institute of Technology and Sciences, was founded with the noble vision to raise professionals and leaders of high academic calibre and unblemished character, nurtured with a strong motivation and commitment to serve humanity. The institution is the fulfillment of the vision of its founders Late Dr. D. G. S. Dhinakaran and the present Chancellor Dr. Paul Dhinakaran. Established in 1986 as an Engineering College, it was granted an autonomous status in 1999 and declared Deemed-to-be University by the University Grants Commission (UGC) in recognition of its academic excellence by the Ministry of Human Resources Development under section 3 of the UGC Act, 1956 vide notification no 9-3-2000-U3 dated 23.6.2004 of the Government of India. Accredited by NAAC, the institution offers a wide array of Bachelors, Masters and Doctoral Degree programmes in various branches of Engineering, Biotechnology, Food processing and Agricultural Sciences. From a humble beginning of 180 students, the institution has rapidly grown to 8491 students and 452 faculty representing 18 academic departments. In the three decades of service to higher education, Karunya Institute of Technology and Sciences has made significant progression in teaching learning, research and consultancy, innovation and transfer of technology, community service and value education. Translating the vision of the Founders into action, the institution is currently engaged in finding solutions to human problems in the four major areas such as Water, Food, Healthcare, and Energy through scientific and technological interventions.



Campus Life

Karunya is a residential institution, hosts diverse, creative and talented people from the state of India and from different parts of the world with a safe, secure environment and a plethora of student activities, the campus life at Karunya is vibrant, colourful, entertaining and engaging.





Drone Technology for Agricultural Mission

Agriculture being the backbone of Indian economy, it has to be supported with emerging tools and one such tool is drone technology. Drones are being used for GIS mapping and other related works, having a potential to solve several problems in Agriculture. KITS has made it a mission to develop Drones for scouting lands and crops, inspecting weeds, monitoring and management of crops and monitoring and managing the grazing areas and health of livestock.