

1. TITLE OF THE LAB EXPERIMENT

Implementation of Page Layout in CSS

2. OBJECTIVES

- To gather knowledge of different CSS layout such as grid, flexbox, and table layout.
- To implement an responsive layout using CSS grid layout.

3. PROCEDURE

1. Write HTML and CSS code for this experiment
2. Start run and debug to check the output is ok or not
3. Take the screenshot of the output
4. Finally merge them all

4. IMPLEMENTATION

1. CSS Flex:

It's one-directional flow has different use cases — and they actually work together quite well! Grid is the very first CSS module created specifically to solve the layout problems we've all been hacking our way around for as long as we've been making websites.

2. CSS Grid:

The CSS Grid Layout Module offers a grid-based layout system, with rows and columns, making it easier to design web pages without having to use floats and positioning.

3. CSS Table:

HTML tables should be used to show tabular data. Using tables for anything other than tabular data has several drawbacks

4. CSS Float:

Floating an element alters the behavior of both the element and the block level elements that follow it in normal flow.

- **CSS for flex:**

```
<style>
  * {
    margin: 0;
    padding: 0;
    box-sizing: border-box;
  }
  body {
    font-family: Arial, sans-serif;
    background-color: #f0f0f0;
    padding: 20px;
  }

  .container {
    max-width: 1200px;
```

```

    margin: 0 auto;
}

h1 {
    text-align: center;
    margin-bottom: 20px;
    background-color: rgb(20, 194, 243);
}

.flex-container {
    display: flex;
    flex-wrap: wrap;
    gap: 10px;
    justify-content: space-between;
}

.flex-item {
    background-color: #00e4f7;
    color: #000;
    padding: 20px;
    border-radius: 8px;
    width: 23%;
    box-shadow: 0 2px 5px rgba(0, 0, 0, 0.2);
}

.flex-item:nth-child(odd) {
    background-color: #b2f2f7;
}

.flex-item:nth-child(even) {
    background-color: #00e4f7;
}

.flex-item {
    width: 100%;
}

```

- **CSS for Table:**

```

* {
    margin: 0;
    padding: 0;
    box-sizing: border-box;
}

body {

```

```

    font-family: Arial, sans-serif;
}

.container {
    display: grid;
    grid-template-columns: 1fr 1fr;
    grid-template-rows: auto auto auto auto auto;    grid-template-areas:
        "header header"
        "section1 aside1"
        "section2 aside2"
        "section3 section3"
        "nav1 nav2";
    gap: 2px; /* Space between the grid items */
    padding: 10px;
    border: 1px solid black;
}

header {
    grid-area: header;
    background-color: #d2b48c; /* Tan color */
    text-align: center;
    padding: 10px;
    border: 1px solid black;
}

.section1 {
    grid-area: section1;
    background-color: #d2691e; /* Chocolate color */
    padding: 10px;
    border: 1px solid black;
}

```

- **CSS for Grid:**

```

* {
    margin: 0;
    padding: 0;
    box-sizing: border-box;
}

body {
    font-family: Arial, sans-serif;
    background-color: #f0f0f0;
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;
}

.container {

```

```

display: grid;
grid-template-columns: 3fr 1fr
grid-template-rows: auto auto 1fr auto;
    "header header"
    "nav nav"
    "section aside"
    "footer footer";
gap: 10px;
width: 90%;
border: 2px solid red;
padding: 10px;
}

```

- **CSS for Float:**

```

body {
    font-family: Arial, sans-serif;
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;
    background-color: #f9f9f9;
}

```

```

.container {
    width: 60%;
    margin: auto;
    position: relative;
}

```

```

.box {
    width: 150px;
    height: 150px;
    background-color: #6a0dad;    color: white;
    display: flex;
    justify-content: center;
    align-items: center;
    font-size: 1.5em;
    border-radius: 10px;
}

```

```

.float-left {
    float: left;
    margin-right: 20px;
}

```

5. TEST RESULT / OUTPUT

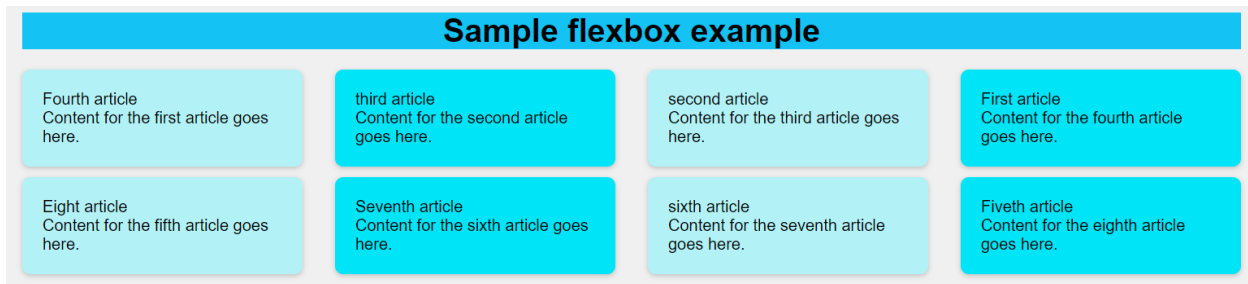


Fig 1: flexbox example

Header Nav	
Section 1	Aside 1
Section 2	Aside 2
Section 3	
Nav1	Nav2

Fig 2: Table example



Fig 3: Grid example

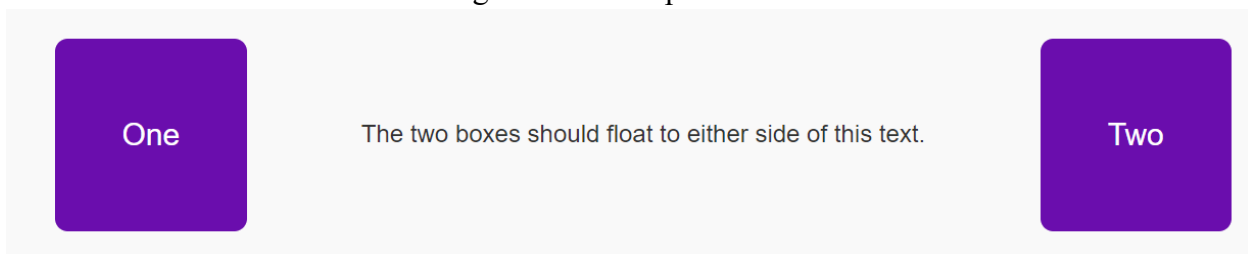


Fig 4: Float example

6. ANALYSIS AND DISCUSSION

- **Content Structure:** HTML organizes content into elements.
- **Content and Style Separation:** HTML structures content; CSS handles design for easier updates.
- **Cascading Styles:** CSS applies styles for make layout.