

Flexbox in CSS

Assignment

Assignment Question

01. Describe the main differences between the CSS Flex box layout model and the CSS Grid layout. Would you choose to use one over the other ?

ANS:

Purpose:

- **Flexbox (Flexible Box Layout):** Flexbox is primarily designed for creating one-dimensional layouts, such as rows or columns. It is well-suited for arranging items within a single container along a single axis, making it ideal for building responsive and dynamic content alignment.
- **Grid (CSS Grid Layout):** Grid is designed for creating two-dimensional layouts, allowing you to create rows and columns simultaneously. It's more suitable for complex grid-based designs and is particularly useful for organizing content in a grid-like fashion, such as a spreadsheet or card-based layout.

Axis:

- **Flexbox:** It operates along a single axis (either horizontally or vertically) and is used to control the arrangement of items along that axis.
- **Grid:** It operates along both the horizontal and vertical axes, creating a grid structure that allows you to define rows and columns independently.

Alignment:

- **Flexbox:** It provides powerful tools for aligning and distributing items within a container along a single axis. You can control the alignment of items both vertically and horizontally within that axis.
- **Grid:** It offers a high level of control over the placement of items in both rows and columns. You can easily create complex layouts with items spanning multiple rows and columns.

Content Flow:

- **Flexbox:** It adjusts the size of items within a container to fit the available space along a single axis, making it great for dynamic content.
- **Grid:** It's more about creating a structure and defining how items are placed

within the grid, and it can handle fixed-size or flexible items.

Nesting:

- **Flexbox:** You can nest flex containers within other flex containers to create more complex layouts, often called "flex within flex."
- **Grid:** You can nest grid containers within other grid containers, enabling you to build intricate two-dimensional layouts.

Browser Support:

- **Flexbox** has good support in modern browsers and is suitable for a wide range of web layouts.
- **Grid** also has good browser support, but it is often used in conjunction with Flexbox to create comprehensive layouts.

Q2.Explain the role of the following key properties in the flexbox layout model

1.justify-content

2.align-items

3.Gap

4.flex-wrap

ANS:

justify-content:

justify-content: is used to define how the flex items are distributed along the main axis (horizontally in a row layout or vertically in a column layout) within the flex container. It controls the alignment of the flex items in this direction.

align-items:

align-items: is used to define how the flex items are aligned along the cross axis (perpendicular to the main axis) within the flex container. It controls the alignment of the flex items

Gap:

Gap: is used to set the space between flex items and, if applicable, between rows or columns in a multi-dimensional flex container (a grid container or flex container).

flex-wrap:

flex-wrap: determines whether flex items should wrap onto a new line or stay on the same line if they overflow the container. It's particularly useful when the combined size of flex items exceeds the size of the flex container along the main axis.

Q3. Write the code to center a div using css flexbox.

ANS:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Document</title>
  <style>
    *{
      margin: 0%;
      padding: 0%;
      outline: 0px;
      box-sizing: border-box;
    }
    body{
      box-sizing: border-box;
      width: 100vw;
      height: 100vh;
      display: flex;
      align-items: center;
      justify-content: center;
      /* border: 4px solid rgb(30, 30, 75); */
    }
  
```

```

    .Green{
        background-color:rgb(36, 160, 36) ;
        height: 300px;
        width: 300px;

    }
</style>
</head>
<body>
    <div class="Green">

    </div>
</body>
</html>

```



Q4. A client of yours wants to add a pricing section on their website to showcase their newly introduced premium plans.

ANS:

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

```

```
<style>
  *{
    margin: 0px;
    padding: 0px;
    outline: 0px;
    box-sizing: border-box;
  }
  .Container{
    height: 100vh;
    width: 100vw;
    background-color: rgb(182, 196, 208);
    border: 4px solid black;
    display: flex;
    justify-content: center;
    align-items: center;
    justify-content: space-evenly;

    gap: 20px;
  }
  .Box{
    /* border: 4px solid rebeccapurple; */
    width: 390px;
    height: 590px;
    border-radius: 10px;
    background-color: aliceblue;
  }

  .Box1{

    display: flex;
    flex-direction: column;
    /* align-items: center; */
    justify-content: center;
    /* font-size: 30px; */
    gap: 25px;
    /* margin-left: 40px; */
    padding: 70px;
  }
  .Box1-1 h1{
    font-size: 50px;
  }
  .Box1-1 p{
    font-size: 25px;
  }

```

```

}
.Box1-2{

    font-size: 45px;

}
.Box1 ul{

    font-size: 20px;
    display: flex;
    flex-direction: column;
    gap: 25px;

}

.Box1 ul li{
    list-style: none;

}
#SubscribeNow{
width: 200px;
    height: 60px;
    color: aliceblue;
    background-color: black;
    border: 2px solid black;
    border-radius: 20px;

}

.Box2 {
    color: aliceblue;
    background-color: black;
}
.Box2 #SubscribeNow{
    color: black;
    background-color: aliceblue;
}

</style>
<link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.4.2/css/all.min.css"
integrity="sha512-z3gLPd7yknf1YoNbCzqRKc4qyor8gaKU1qmn+CSHxbuBusANI9QpRohGBreCF
kKxLhei6S9CQXFEbbKuqLg0DA==" crossorigin="anonymous"
referrerpolicy="no-referrer" />
</head>
<body>
    <div class="Container">

        <section class= "Box Box1">

            <div class="Box1-1">

```

```

        <h1>Free plan</h1>
        <p>For Personal</p>

    </div>
    <div class="Box1-2">
        <h1>$0</h1>
    </div>
    <ul>
        <li><i class="fa-solid fa-circle-check"></i> 1 Users</li>
        <li><i class="fa-solid fa-circle-check"></i> 4 Web Mails</li>
        <li><i class="fa-solid fa-circle-check"></i> Responsive
Website</li>
        <li><i class="fa-solid fa-circle-check"></i> Free SSL</li>

    </ul>
    <input type="submit" id="SubscribeNow" value="SubscribeNow"
name="SubscribeNow">

</section>
<section class="Box Box1 Box2">

    <div class="Box1-1">
        <h1>Basic Plan</h1>
        <p>For Small business</p>

    </div>
    <div class="Box1-2">
        <h1>$29</h1>
    </div>
    <ul>
        <li><i class="fa-solid fa-circle-check"></i> 4 Users</li>
        <li><i class="fa-solid fa-circle-check"></i> 10 Web Mails</li>
        <li><i class="fa-solid fa-circle-check"></i> Responsive
Website</li>
        <li><i class="fa-solid fa-circle-check"></i> Free SSL</li>

    </ul>
    <input type="submit" id="SubscribeNow" value="SubscribeNow"
name="SubscribeNow">

</section>
<section class="Box Box1 ">
    <div class="Box1-1">
        <h1>Pro plan</h1>
        <p>For enterprise</p>

    </div>
    <div class="Box1-2">
        <h1>$29</h1>
    </div>
    <ul>

```

```

        <li><i class="fa-solid fa-circle-check"></i> Ulimited Users
</li>

        <li><i class="fa-solid fa-circle-check"></i> Ulimited Web
Mails</li>

        <li><i class="fa-solid fa-circle-check"></i> Responsive
Website</li>

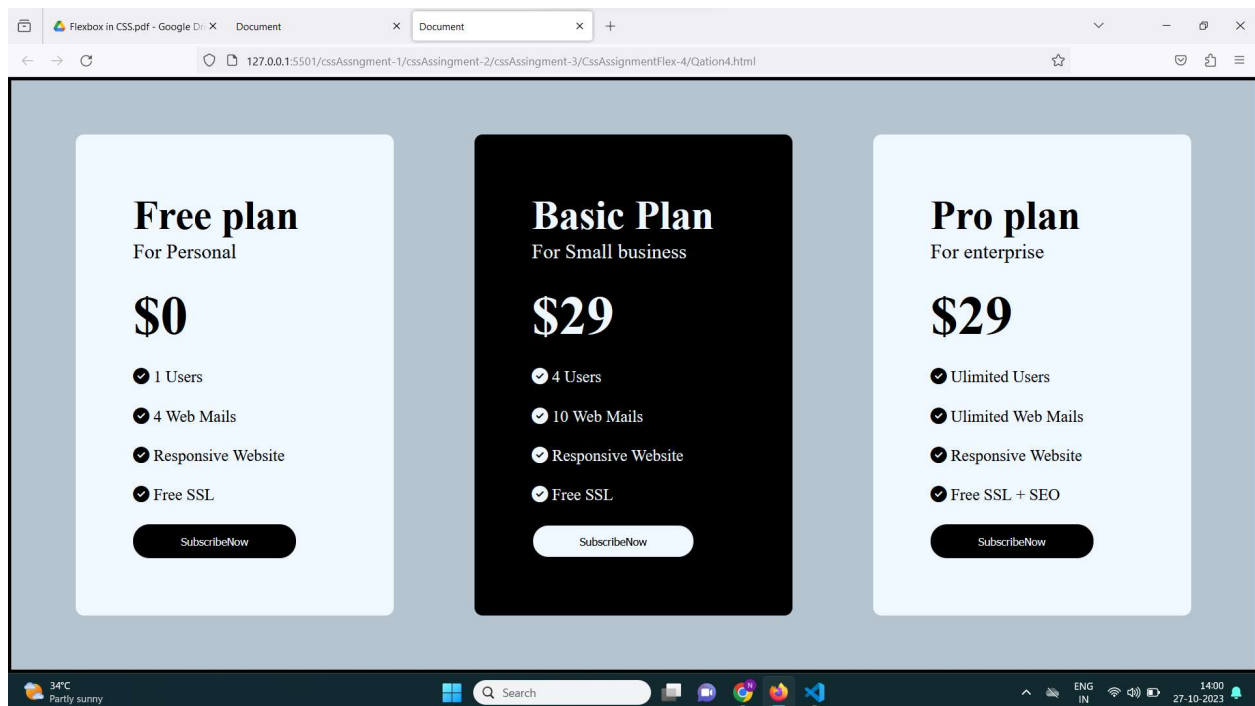
        <li><i class="fa-solid fa-circle-check"></i> Free SSL +
SEO</li>

    </ul>
    <input type="submit" id="SubscribeNow" value="SubscribeNow"
name="SubscribeNow">

</section>

</div>
</body>
</html>

```



Q5.build a clone of the IRCTC Ticket booking page.

ANS:

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>
    <style>

```



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

.Container{
  width: 100vw;
  height: 100vh;
  border: 3px solid black;
  display: flex;
}

.Left{
  width: 60%;

  padding: 20px 30px 20px 30px;

  display: flex;
  flex-direction: column;
  gap: 50px;
}

.Left1{
  display: flex;
  flex-direction: row;

  align-items: center;
  justify-content: space-between;
}

.Left1-Logo img{
  height: 80px;
  /* border: 1px solid red; */
}

.Left1-Info{
  display: flex;
  flex-direction: column;
}

.Left1-Info ul{
  display: flex;
  gap: 30px;
  /* text-decoration: none; */
  list-style: none;

  align-items: center;
  align-self: flex-end;
  /* list-style: none; */
}
```

```
}
.Left1-Info ul li a{
    /* list-style: none; */
    text-decoration: none;
    font-size: 25px;
}

.Left1-Button {
    display: flex;
    gap: 30px;
}

.Left1-Button button{
    padding: 10px;
    width: 120px;
}

.Left1-Button button:first-child{
    background-color: orangered;
    color: aliceblue;
}

.Left2{
    display: flex;
    flex-direction: column;
}

.Left2 h1{
    font-size: 40px;
}

.Left2 ul{
    display: flex;
    gap: 20px;
}

.Left2 ul li {
    list-style: none;
    font-size: 20px;
    /* padding: 20px; */
}

.Green{
    color: green;
}

.Orange{
    color: orange;
}

.Blue{
    color: blue;
}

.Left3{
    display: flex;
    gap: 20px;
```

```
}
.Left3 button{
  padding: 10px;

}
.Left3 button:first-child{
  background-color: blue;
  color: aliceblue;
}
.Left5{
  /* margin: 30px; */
  margin-top: 20px;
}
.Left4{
  border: 1px solid black;
  display: flex;
  /* padding: 50px; */
  padding-left: 100px;
  padding: 15px;
  gap: 170px;
  align-items: center;
  justify-content: center;

}
.Left4-1{

  display: flex;
  align-items: center;
  gap: 10px;
}

.Left4-3{
  display: flex;
  align-items: center;
  gap: 10px;
}
.Left5-2{
  display: flex;
  align-items: center;
  gap: 20px;
}
.Left41{
  padding-left: 20px;
}
.Left6{
  display: flex;
  text-align: center;
}
.Left6 #SearchTrain{
  width: 830px;
  padding: 10px;
  /* text-align: center; */
}
```

```

        background-color: green;
        color:aliceblue;
    }

    .Right{
        width: 40%;

    }
    .Right img{
        width: 83vh;
        margin-left: 0%;
    }

</style>
<link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.4.2/css/all.min.css"
integrity="sha512-z3gLpd7yknf1YoNbCzqRKc4qyor8gaKU1qmn+CSHxbuBusANI9QpRohGBreCF
kKxLhei6S9CQXFEbbKuqLg0DA==" crossorigin="anonymous"
referrerpolicy="no-referrer" />

</head>
<body>

    <div class="Container">

        <section class="Left">
            <div class="Left1">
                <div class="Left1-Logo">
                    

                </div>
                <div class="Left1-Info">
                    <ul>
                        <li><a href="#" ">Ask Disha</a></li>
                        <li><a href="#" "> Contact Us </a></li>
                        <li><a href="#" ">Alerts</a></li>

                    </ul>
                    <div class="Left1-Button">

```

```

        <button>Logic</button>

        <button>Register</button>
        <button>Agent Login</button>

    </div>

</div>

</div>
<div class="Left2">
    <h1>
        Indian Railways
    </h1>
    <ul>
        <li class="Green">Safety</li>
        <li class="Orange">Security</li>
        <li class="Blue">punctuality</li>
    </ul>
</div>
<div class="Left3">
    <button>
        <i class="fa-solid fa-ticket"></i> BOOK Ticket
    </button>
    <button>
        <i class="fa-solid fa-check"></i> PNR Status
    </button>
    <button>
        <i class="fa-regular fa-square-poll-vertical"></i>
Charts/vacancy
    </button>
</div>
<div class="Box">

    <div class="Left4 Left41">
        <div class="Left4-1">
            <div class="Left4-1Logo">
                

            </div>
            <div class="Left4-1Info">
                <div class="Form">
                    <span>Form </span>
                    <i class="fa-solid fa-chevron-up"></i>

                </div>
                <div class="Location">
                    <h2>Bangalore</h2>

```

```

        <span>KSR-Bangalore</span>

    </div>

</div>

<div class="Left4-2">
    <i class="fa-solid fa-left-right"></i>

</div>

<div class="Left4-3">
    <div class="Left4-3logo">
        <i class="fa-solid fa-train"></i>

    </div>
    <div class="Left4-3Info">
        <div class="T0">
            <span>To</span>
            <i class="fa-solid fa-chevron-up"></i>

        </div>
        <div class="Location">
            <h2>Kasaragod</h2>
            <span>Kds-Kasaragod</span>

        </div>
    </div>

</div>

<div class="Left4 Left5">
    <div class="Left4-1">
        <div class="Left4-1Logo">
            <i class="fa-solid fa-calendar-days"></i>

        </div>
        <div class="Left4-1Info">
            <div class="Form">
                <span>Date</span>
                <i class="fa-solid fa-chevron-up"></i>

            </div>
            <div class="Location">

```

<h2>01 Aug 23</h2>
Tuesday

</div>

</div>

</div>

<div class="Left4-2 Left5-2 ">

<div class="Left4-2">

Class

<i class="fa-solid fa-chevron-up"></i>

<h2>3A</h2>

AC 3 tier

</div>

</div>

<div class="Left4-3">

<div class="Left4-3logo">

</div>

<div class="Left4-3Info">

<div class="T0">

Seat Type

<i class="fa-solid fa-chevron-up"></i>

</div>

<div class="Location">

<h2>TATKAL</h2>

AC 3 Tier

</div>

</div>

</div>

```

</div>

</div>
<div class="Left6">
    <input type="submit" value="Search Train" name="Search Train"
id="SearchTrain">
</div>
</section>

<section class="Right">
    

</section>

</div>
</body>
</html>

```

