Assignment

Flexbox in CSS

Q-1 Describe the main difference between the CSS Flexbox layout model and the CSS Grid layout model. When would you choose to use one over the other?

Ans - The main difference between the CSS Flexbox layout model and the CSS Grid layout model lies in their purposes and the kinds of layouts they are best suited for:

Flexbox Layout Model

- The Flexbox layout model is designed for one-dimensional layouts.
- It is ideal for distributing space along a single axis (either horizontal or vertical) and for aligning items within a container.
- Items in a flex container can grow or shrink to fill available space.
- Allows easy management of responsive design and dynamic content.

Grid Layout Model

- The Grid layout model is designed for two-dimensional layouts.
- It is suitable for creating complex grid-based designs
- Supports overlapping items, grid areas, and named grid lines.
- Provides explicit control over the positioning and sizing of items within the grid.

When to Use Flexbox vs. Grid

- **Use Flexbox when:**

  - You need a simple one-dimensional layout (either a row or a column).
  - You want to distribute space among items in a container and control their alignment.
  - You are dealing with dynamic content that may change in size or number.
  - You need to create flexible, responsive designs with minimal effort.

- **Use Grid when:**

- You need a two-dimensional layout with both rows and columns.
- You want precise control over the placement and sizing of elements.
- You are creating a complex design that requires a structured grid-based layout.
- You need to align items both horizontally and vertically within a grid.

Q-2 Explain the role of the following key properties in the Flex box model layout

Ans:-

1) **justify-Content** : The justify-content property in Flexbox aligns flex items along the main axis, controlling their spacing and distribution within the container.
2) **align-items** : The align-items property in Flexbox aligns flex items along the cross axis of the container.
3) **gap** : The gap property in Flexbox specifies the spacing between flex items. It can be used for both rows and columns:
4) **flex-direction** : The flex-direction property defines the direction in which flex items are placed in the flex container.
5) **flex-wrap** : The flex-wrap property controls whether the flex container is single-line or multi-line, and the direction of the new lines:

Q-3 Write the code to center a div using css flexbox

Ans : -

Code -

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

        body{
            display: flex;
            align-items: center;
            justify-content: center;
            height: 100vh;
            background-color: lightgrey;
```
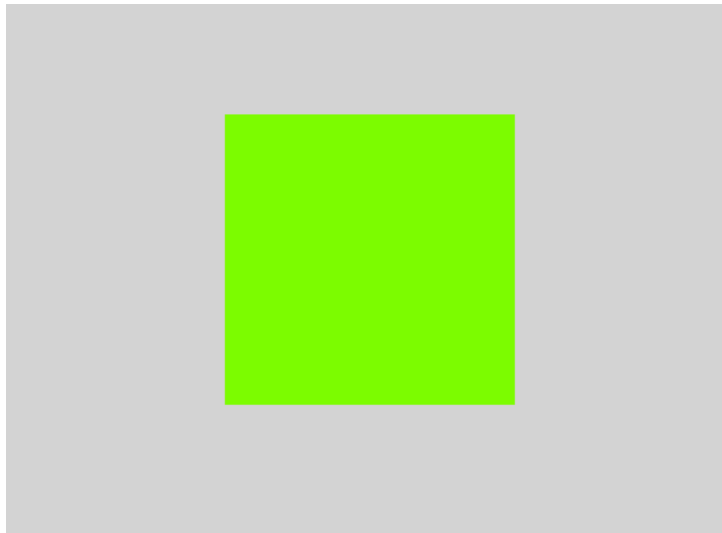
```
        }
        .box{
            width: 200px;
            height: 200px;
            background-color: lawngreen;

        }
    </style>
</head>
<body>
    <div class="box"></div>
</body>
</html>
```

Output

Q-4 A client of yours wants to add a pricing section on their website to showcase their newly introduced premium plans.
You have to build the pricing section for their business. They have provided you with the figma design for the same. Link

Ans :-

HTML
```
<!DOCTYPE html>
<html lang="en">
  <head>
```

```html
    <meta charset="UTF-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0"
/>
    <title>Flexbox in CSS</title>
    <link rel="stylesheet" href="style.css" />
    <link rel="preconnect" href="https://fonts.googleapis.com" />
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin />
    <link

href="https://fonts.googleapis.com/css2?family=Inter:wght@100..900&display
=swap"
      rel="stylesheet"
    />
    <link
      rel="stylesheet"

href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.6.0/css/all.mi
n.css"
    />
  </head>
  <body>
    <div class="pricing_section">
      <div class="card">
        <div class="card_title">Free Plan</div>
        <div class="card_subtitle">For Personal</div>
        <div class="price">$0</div>
        <ul>
          <li>
            <i class="fa-solid fa-circle-check icon"></i>
            <span>1 users</span>
          </li>
          <li>
            <i class="fa-solid fa-circle-check icon"></i>
            <span>4 Web Mails</span>
          </li>
          <li>
            <i class="fa-solid fa-circle-check icon"></i>
            <span>Responsive Website </span>
          </li>
          <li>
```

```html
        <i class="fa-solid fa-circle-check icon"></i>
        <span>Free SSL</span>
      </li>
    </ul>
    <button class="btn">Subscribe Now</button>
  </div>

  <div class="card color">
    <div class="card_title">Basic Plan</div>
    <div class="card_subtitle">For small business</div>
    <div class="price">$29</div>
    <ul>
      <li>
        <i class="fa-solid fa-circle-check icon "></i>
        <span>4 users</span>
      </li>
      <li>
        <i class="fa-solid fa-circle-check icon "></i>
        <span>10 Web Mails</span>
      </li>
      <li>
        <i class="fa-solid fa-circle-check icon "></i>
        <span>Responsive Website </span>
      </li>
      <li>
        <i class="fa-solid fa-circle-check icon "></i>
        <span>Free SSL</span>
      </li>
    </ul>
    <button class="btn btn1">Subscribe Now</button>
  </div>

  <div class="card">
    <div class="card_title">Pro Plan</div>
    <div class="card_subtitle">For enterprise</div>
    <div class="price">$49</div>
    <ul>
      <li>
        <i class="fa-solid fa-circle-check icon"></i>
        <span>Unlimited users</span>
```

```html
          </li>
          <li>
            <i class="fa-solid fa-circle-check icon"></i>
            <span>Unlimited Web Mails</span>
          </li>
          <li>
            <i class="fa-solid fa-circle-check icon"></i>
            <span>Responsive Website </span>
          </li>
          <li>
            <i class="fa-solid fa-circle-check icon"></i>
            <span>Free SSL +</span>
          </li>
        </ul>
        <button class="btn">Subscribe Now</button>
      </div>
    </div>
  </body>
</html>
```

CSS

```css
* {
    box-sizing: border-box;
    margin: 0;
    padding: 0;
    font-family: "Inter", sans-serif;
}

.pricing_section {
    display: flex;
    justify-content: center;
    background-color: rgb(244, 242, 253);
    padding: 50px;
    gap: 20px;
}

.card {
    display: flex;
    flex-direction: column;
```

```css
    background-color: white;
    padding: 30px;
    width: 230px;
    color: rgb(32, 40, 66);
    border-radius: 7px;
    box-shadow: rgba(0, 0, 0, 0.24) 0px 3px 8px;
}

.card_subtitle,span {
    font-size: 14px;
}

span {
    margin-left: 5px;
}

.card_title, .price {
    font-size: 28px;
    font-weight: 500;
}

.price {
    margin: 15px 0;
}

ul {
    list-style: none;
}

li {
    margin: 5px 0;
}

.icon {
    font-size: 20px;
}

.btn {
    margin-top: 20px;
    background-color: rgb(32, 40, 66);
```
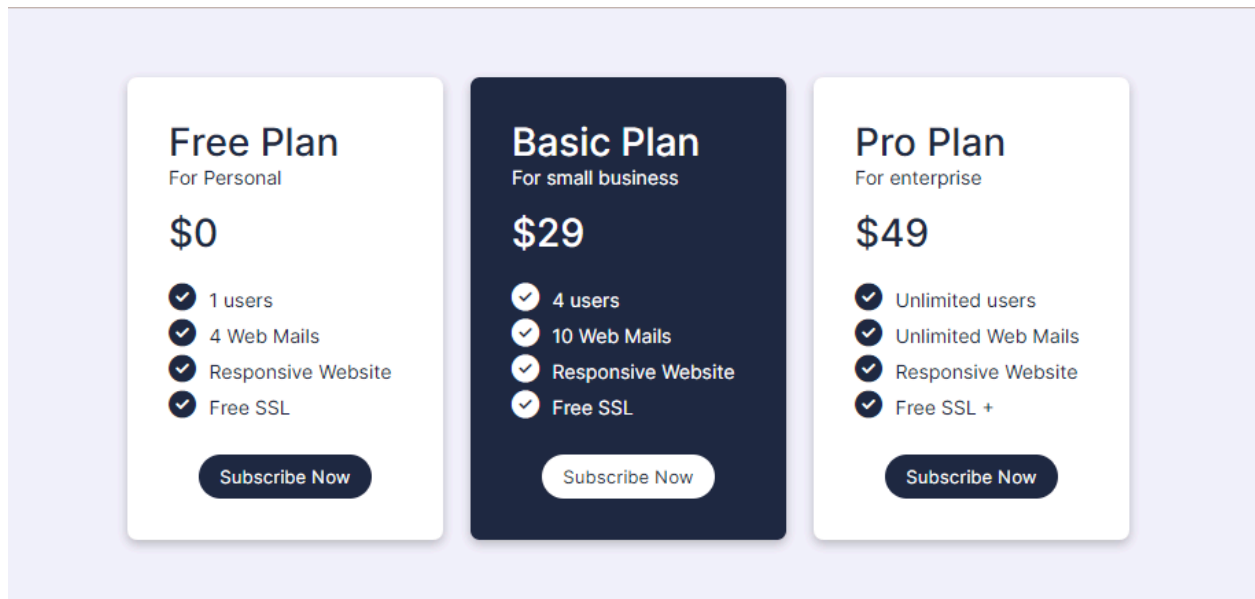
```css
        color: white;
    padding: 8px 15px;
    border-radius: 30px;
    align-self: center;
    border: none;
}

.color {
    background-color: rgb(32, 40, 66);
    color: white;
}

.btn1 {
    color: rgb(32, 40, 66);
    background-color: white;
}
```

Output

Q5. Build a clone of the IRCTC Ticket booking page.
Link to the figma file: Link

Ans : -
HTML

```html
<!DOCTYPE html>
<html lang="en">
```

```html
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0"
/>
  <title>IRCTC Ticket booking page.</title>
  <link
    rel="stylesheet"

href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.6.0/css/all.mi
n.css"
  />
  <link rel="stylesheet" href="style.css" />
</head>
<body>
  <div class="container">
    <div class="left_part">
      <div class="right_header">
        <div class="logo_container">
          <img src="./asserts/logo.png" alt="logo" />
          <img src="./asserts/secondry-logo.png" alt="logo" class="logo"
/>
        </div>
        <div class="options">
          <div class="query">
            <div class="ask_disha">Ask Disha</div>
            <div class="contact">Contact Us</div>
            <div class="alert">Alerts</div>
          </div>
          <div class="auth">
            <div class="login">login</div>
            <div class="register">register</div>
            <div class="agent_login">Agent login</div>
          </div>
        </div>
      </div>
      <h1>Indian Railways</h1>
      <p>
        <span class="green">Safety</span>
        <span class="orange">Security</span>
        <span class="blue">Punctuality</span>
```

```html
    </p>
    <div class="ticket_section">
      <div class="book_ticket">
        <i class="fa-solid fa-ticket"></i>
        <div>BOOK Ticket</div>
      </div>
      <div class="pnr">
        <i class="fa-solid fa-check"></i>
        <div>PNR Status</div>
      </div>
      <div class="chart">
        <i class="fa-solid fa-chart-simple"></i>
        <div>Charts / Vacancy</div>
      </div>
    </div>
    <div class="train_info">
      <div class="from">
        <div class="from_logo">
          <i class="fa-solid fa-train train"></i>
        </div>
        <div class="from_right">
          <select name="" id="">
            <option value="from">From</option>
          </select>
          <h4>Banglore</h4>
          <div class="short_info">KSR - Banglore</div>
        </div>
      </div>
      <div class="exchange">
        <i class="fa-solid fa-arrow-right-arrow-left"></i>
      </div>
      <div class="to">
        <div class="to_logo">
          <i class="fa-solid fa-train train"></i>
        </div>
        <div class="to_right">
          <select name="" id="">
            <option value="to">to</option>
          </select>
          <h4>Kasaragod</h4>
```

```html
          <div class="short_info">KSD - Kasaragod</div>
        </div>
      </div>
    </div>
    <div class="other_info">
      <div class="date">
        <div class="date_logo">
          <i class="fa-solid fa-calendar-days"></i>
        </div>
        <div class="date_left">
          <select name="" id="">
            <option value="date">Date</option>
          </select>
          <h4>1 Aug 23</h4>
          <div class="short_info">Tuesday</div>
        </div>
      </div>
      <div class="class">
        <div class="class_logo">
          <i class="fa-solid fa-ellipsis"></i>
        </div>
        <div class="class_left">
          <select name="" id="">
            <option value="class">Class</option>
          </select>
          <h4>3A</h4>
          <div>AC 3 Tier</div>
        </div>
      </div>
      <div class="seat_type">
        <div class="seat_logo">
          <i class="fa-solid fa-table-cells-large"></i>
        </div>
        <div class="seat_left">
          <select name="" id="">
            <option value="seat">Seat Type</option>
          </select>
          <h4>Tatkal</h4>
          <div class="short_info">AC 3 Tier</div>
        </div>
```

```
          </div>
        </div>
        <div class="btn">
          <div>Search Train</div>
          <i class="fa-solid fa-arrow-right"></i>
        </div>
      </div>
      <div class="right_part">
        <img src="asserts/image.png" alt="train" class="image" />
      </div>
    </div>
  </body>
</html>
```

CSS

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

.container {
    display: flex;
    margin: auto;
    width: 85%;
}

.left_part {
    padding: 30px 30px 0 0;
}

.left_part,
.right_part {
    width: 50%;
}

.right_header {
    display: flex;
```

```css
    justify-content: space-between;
}

.logo {
    margin-left: 20px;
}

.query,
.auth {
    display: flex;
    gap: 20px;
}

.query div {
    cursor: pointer;
}

.auth {
    text-transform: capitalize;
    margin-top: 15px;
}

.login {
    background-color: rgb(251, 121, 43);
    color: white;
    padding: 8px 15px;
    border-radius: 5px;
    cursor: pointer;
}

.register,
.agent_login {
    border: 1px solid grey;
    padding: 8px;
    border-radius: 5px;
    cursor: pointer;
}

h1 {
    margin-top: 50px;
```

```css
        margin-bottom: 10px;
        font-size: 42px;
}


p {
        font-size: 25px;
        margin-bottom: 80px;
}

.green {
        color: rgb(71, 138, 4);
}

.orange {
        color: orange;
}

.blue {
        color: blue;
}

.ticket_section {
        margin-bottom: 50px;
        display: flex;
        gap: 30px;
}

.book_ticket,
.pnr,
.chart {
        display: flex;
        gap: 10px;
        padding: 10px 15px;
        background-color: rgb(33, 61, 119);
        color: white;
        border-radius: 5px;
        cursor: pointer;
}

.pnr,
```

```css
.chart {
    background-color: white;
    color: black;
    border: 1px solid grey;
}

.train_info,
.other_info {
    border: 1px solid rgba(128, 128, 128, 0.082);
    padding: 20px;
    display: flex;
    gap: 50px;
    align-items: center;
    margin-bottom: 20px;
}

.from,
.to,
.date,
.class,
.seat_type {
    display: flex;
    gap: 20px;
    align-items: center;
    line-height: 1.3;
}

.train {
    font-size: 20px;
}

select {
    border: none;
    color: rgba(128, 128, 128, 0.678);
}

h4 {
    font-size: 23px;
}
```

```css
.short_info {
    font-size: 14px;
    color: rgba(128, 128, 128, 0.678);
}

.exchange {
    width: 50px;
    height: 50px;
    border-radius: 50%;
    border: 1px solid rgba(128, 128, 128, 0.219);
    text-align: center;
    display: flex;
    align-items: center;
    justify-content: center;
    color: rgba(128, 128, 128, 0.219);
}

.btn {
    background-color: rgb(1, 187, 10);
    display: flex;
    align-items: center;
    gap: 15px;
    color: white;
    font-weight: 700;
    padding: 15px 25px;
    border-radius: 5px;
    justify-content: center;
    margin-top: 50px;
}



.image {
    text-align: center;
    width: 100%;
    background-position: center;
    background-size: cover;
    background-repeat: no-repeat;
}
```

Output