

Assignment 1

Flexbox Assignment

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

Ans: Introduction to Differences:

- Flexbox is designed for one-dimensional layouts. It works either in a row or a column. It uses the concept of the main axis and cross axis. Items can be aligned along these axes.
 - Flexbox adjusts its items according to the content within them. It is ideal for situations where you want to distribute space among items in a container, even if their size is unknown or dynamic.
 - It provides powerful alignment capabilities such as align-items, justify-content, and align-self. It is great for small-scale layouts, such as navigation bars, footers, or components within a larger design.
 - Grid is designed for two-dimensional layouts. It works both in rows and columns, allows you to control both dimensions simultaneously.
 - Grid allows for the creation of complex layouts, independent of the content size. It provides a systematic approach to design a webpage.
 - Items can be placed precisely in a grid cell or span multiple cells with properties like grid-column and grid-row.
2. Explain the role of following key properties in the Flexbox layout model:
 - a) justify-content: This property is used to align and distribute elements the flex items across the main axis. It has the following values: flex-start, flex-end, center, space-between, space-around and space-evenly.
 - b) align-items: This property is used to align and distribute elements the flex items across the cross axis. It has the following values: flex-start, flex-end, center, baseline and stretch.
 - c) gap: This property is used to set the gap between the flex items.
 - d) flex-direction: Each flex container has a direction attached to it. The items inside the container are arranged in that direction only. The default direction is row. We can change it to column, column-reverse, row-reverse.
 - e) flex-wrap: This property allows flex items to wrap in multiple lines.

3. Write a code to center a div using flexbox.

Ans: HTML Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<link rel="stylesheet" href="style.css">
<title>Flexbox Assignment</title>
</head>
<body>
  <h1 id="main-heading">Code to center a div using flexbox</h1>
  <div class="container">
    <div class="centered-div">Centered Div</div>
  </div>
</body>
</html>
```

CSS Code:

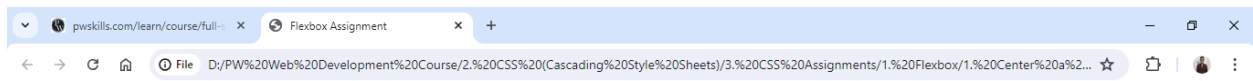
```
* {
  margin: 0;
  padding: 0;
  box-sizing: border-box;
  font-family: 'Times New Roman', Times, serif;
}
```

```
#main-heading {
  text-align: center;
  margin-top: 10px;
  color: red;
}
```

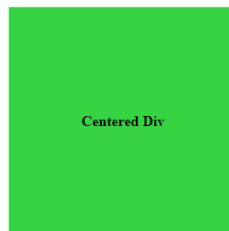
```
.container {
```

```
display: flex;
justify-content: center;
align-items: center;
height: 80vh;
}

.centered-div {
width: 250px;
height: 250px;
background-color: rgb(44, 214, 44);
text-align: center;
line-height: 250px;
font-weight: bold;
}
```



Code to center a div using flexbox



Activate Windows
Go to Settings to activate Windows.



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

Ans: HTML Code:

<!DOCTYPE html>

```
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<link href='https://unpkg.com/boxicons@2.1.4/css/boxicons.min.css'>
<link rel="stylesheet" href="style.css">
<title>Pricing Section</title>
</head>
<body>
  <div id="pricing-section">
    <div class="card">
      <h1>Free Plan</h1>
      <p class="info-text">For personal</p>
      <h2 class="price">$0</h2>
      <p><i class='bx bxs-check-circle'></i> 1 users included</p>
      <p><i class='bx bxs-check-circle'></i> 4 Web mails</p>
      <p><i class='bx bxs-check-circle'></i> Responsive Website</p>
      <p><i class='bx bxs-check-circle'></i> Free SSL</p>
    </div>

    <div class="card" id="card-2">
      <h1>Basic Plan</h1>
      <p class="info-text">For small business</p>
      <h2 class="price">$29</h2>
      <p><i class='bx bxs-check-circle'></i> 4 users included</p>
      <p><i class='bx bxs-check-circle'></i> 10 Web mails</p>
      <p><i class='bx bxs-check-circle'></i> Responsive Website</p>
      <p><i class='bx bxs-check-circle'></i> Free SSL</p>
    </div>

    <div class="card">
      <h1>Pro Plan</h1>
      <p class="info-text">For enterprise</p>
      <h2 class="price">$49</h2>
      <p><i class='bx bxs-check-circle'></i> Unlimited users</p>
```

```
        <p><i class='bx bxs-check-circle'></i> Unlimited Web mails</p>
        <p><i class='bx bxs-check-circle'></i> Responsive Website</p>
        <p><i class='bx bxs-check-circle'></i> Free SSL + SEO</p>
    </div>
</div>
</body>
</html>
```

CSS Code:

```
:root {
    --text-color: #22313f;
    --background-color: #22313f;
}

* {
    margin: 0;
    padding: 0;
    box-sizing: border-box;
    font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
}

#pricing-section {
    display: flex;
    justify-content: center;
    align-items: center;
    margin-top: 100px;
    flex-wrap: wrap;
}

.card {
    margin: 10px;
    padding: 10px;
    width: 300px;
    height: 300px;
```

```
    gap: 10px;
    border-radius: 10px;
    box-shadow: rgba(0, 0, 0, 0.24) 0px 3px 8px;
}
```

```
h1 {
    letter-spacing: 0.5px;
    color: var(--text-color);
}
```

```
h1,
h2 {
    margin-left: 10px;
    margin-top: 15px;
}
```

```
.price {
    margin-top: 10px;
    font-size: 32px;
    letter-spacing: 1px;
}
```

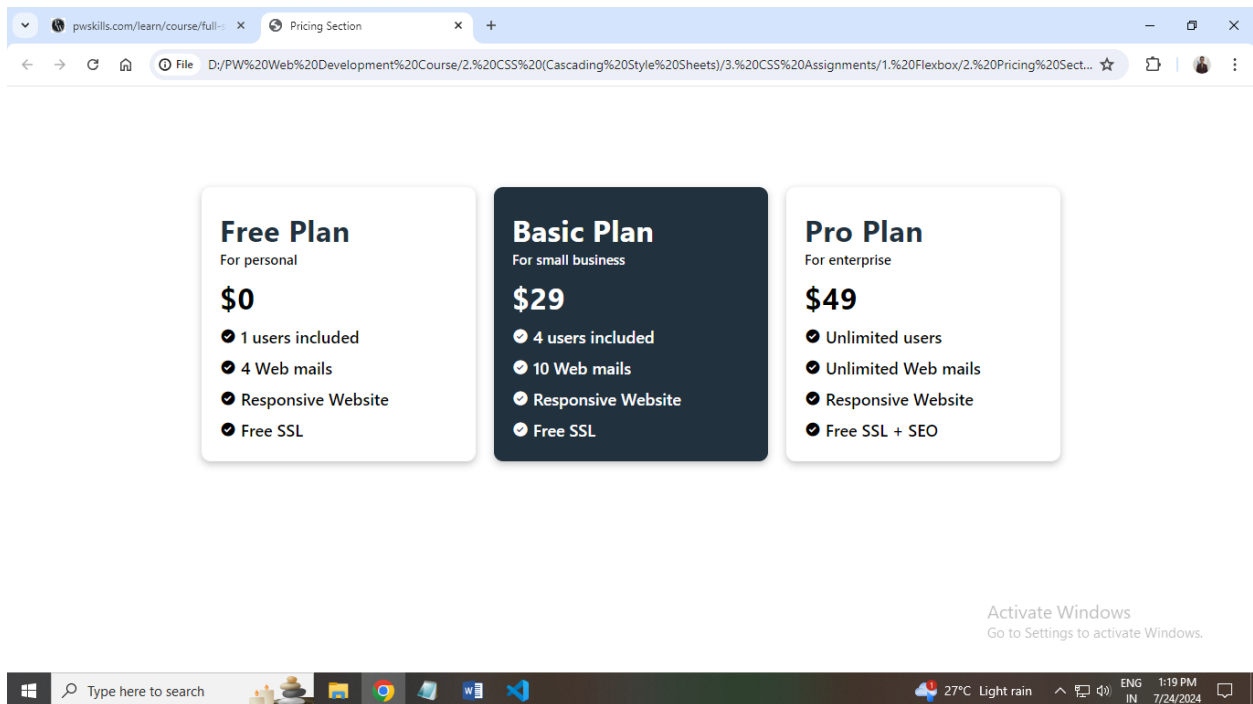
```
.info-text {
    margin-top: 1px;
    font-size: 15px;
}
```

```
p {
    margin-left: 10px;
    margin-top: 10px;
    font-weight: 500;
    font-size: 18px;
}
```

```
#card-2 {
```

```
background-color: var(--background-color);
color: white;
}
```

```
#card-2 h1 {
color: white;
}
```



5. Build an IRCTC Home Page Clone.

Ans: HTML Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<link href='https://unpkg.com/boxicons@2.1.4/css/boxicons.min.css'>
<link rel="stylesheet" href="style.css">
<title>IRCTC</title>
</head>
```

```
<body>
```

```
<div class="main">
```

```
<div class="left-section">
```

```
<div class="nav">
```

```
<div class="logo">
```

```

```

```

```

```
</div>
```

```
<div class="menu">
```

```
<div class="menu-item">
```

```
<a href="#">Ask Disha</a> <br>
```

```
<button class="btn-login">Login</button>
```

```
</div>
```

```
<div class="menu-item">
```

```
<a href="#">Contact Us</a> <br>
```

```
<button class="btn-reg">Register</button>
```

```
</div>
```



```
<div class="menu-item">
```

```
  <a href="#">Alert</a> <br>
```

```
  <button class="btn-reg">Agent Login</button>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
<h1 id="main-heading">Indian Railways</h1>
```

```
<div class="sub-heading">
```

```
  <p id="safety">Safety</p>
```

```
  <p id="security">Security</p>
```

```
  <p id="punctuality">Punctuality</p>
```

```
</div>
```

```
<div class="train-information">
```

```
  <p id="book-ticket"><i class='bx bxs-train'></i> BOOK TICKET</p>
```

```
  <p id="pnr-status"><i class='bx bx-check'></i> PNR Status</p>
```

```
  <p id="bar-chart"><i class='bx bx-bar-chart'></i> Bar Charts</p>
```

```
</div>
```

```
<div class="train-location">
```

```
  <div class="location-section">
```

<i class='bx bxs-location-plus'></i>

<div class="information-div">

<p>From *<i class='bx bx-chevron-down'></i></p>*

<h2>Bangalore</h2>

<p>KSR - Bangalore</p>

</div>

</div>

<i class='bx bx-transfer'></i>

<div class="location-section">

<i class='bx bxs-location-plus'></i>

<div class="information-div">

<p>To *<i class='bx bx-chevron-down'></i></p>*

<h2>Kasaragod</h2>

<p>KSD - Kasaragod</p>

</div>

</div>

</div>

<div class="train-location">

<div class="location-section">

<i class='bx bx-calendar-week'></i>

<div class="information-div">

<p>Date <i class='bx bx-chevron-down'></i></p>

<h2>1 Aug 23</h2>

<p>Tuesday</p>

</div>

</div>

<div class="location-section">

<i class='bx bxs-circle'></i>

<div class="information-div">

<p>Class <i class='bx bx-chevron-down'></i></p>

<h2>3A</h2>

<p>AC 3 Tier</p>

</div>

</div>

<div class="location-section">

```
<i class='bx bxs-package'></i>

<div class="information-div">

    <p>Seat Type <i class='bx bx-chevron-down'></i></p>

    <h2>TATKAL</h2>

    <p>AC 3 Tier</p>

</div>

</div>

</div>

<button id="search-button">Search Train <i class='bx bx-right-arrow-
alt' ></i></button>

</div>

<div class="right-section">

</div>

</div>
</body>

</html>
```

CSS Code:

```
html,  
body {  
    margin: 0;  
    padding: 0;  
    font-family: 'Times New Roman', Times, serif;  
}
```

```
.main {  
    display: flex;  
    width: 100%;  
}
```

```
.left-section {  
    display: flex;  
    flex-direction: column;  
    width: 60%;  
}
```

```
.right-section {  
    display: flex;  
    flex-direction: column;  
    width: 40%;  
    height: 100vh;  
}
```

```
.logo {  
    position: relative;  
    width: 168.31px;  
    height: 81.11px;  
}
```

```
.logo img {  
    height: 81.11px;  
    width: 81.11px;  
}
```

```
#second-img {  
    position: absolute;  
    left: 98.31px;  
}
```

```
img {  
    height: 100vh;  
    width: 100%;  
}
```

```
.nav {  
    display: flex;
```

```
flex-direction: row;
width: 100%;
margin: 40px 60px;
line-height: 34px;
}
```

```
.menu {
  display: flex;
  width: 100%;
  justify-content: center;
}
```

```
.menu-item {
  margin: 0 10px;
}
```

```
.menu-item button{
  cursor: pointer;
}
```

```
a {
  text-decoration: none;
  color: #333333;
  font-size: 23px;
```

```
    font-weight: 500;
}
```

```
.btn-login {
    background-color: #FB792B;
    border-radius: 5.07px;
    padding: 10.14px 15.21px 10.14px 15.21px;
    color: #ffffff;
    font-size: 15.21px;
    border: none;
}
```

```
.btn-reg {
    background-color: #ffffff;
    border-radius: 5.07px;
    padding: 10.14px 15.21px 10.14px 15.21px;
    color: #333333;
    font-size: 15.21px;
    border: 1px solid #333333;
}
```

```
#main-heading {
    margin: 0 55px;
    font-size: 50px;
```



```
}
```

```
.sub-heading {  
  display: flex;  
  margin: 0 55px;  
  gap: 15px;  
  font-size: 25px;  
  font-weight: 500;  
}
```

```
#safety {  
  color: green;  
}
```

```
#security {  
  color: #FB792B;  
}
```

```
#punctuality {  
  color: blue;  
}
```

```
.train-information {  
  margin: 0 55px;
```

```
font-weight: 500;
display: flex;
gap: 20px;
font-size: 20px;
}
```

```
.bx-check, .bx-bar-chart, .bxs-train {
  font-size: 20px;
}
```

```
#book-ticket, #pnr-status, #bar-chart {
  border: 2px solid black;
  padding: 10px;
}
```

```
#book-ticket {
  background-color: #030733;
  color: #ffffff;
}
```

```
.train-location {
  display: flex;
  justify-content: space-evenly;
  padding: 20px;
```

```
border: 1px solid #ccc;  
border-radius: 5px;  
background-color: #f9f9f9;  
margin-top: 15px;  
margin-left: 55px;  
margin-right: 55px;  
}
```

```
.location-section {  
  display: flex;  
  align-items: center;  
}
```

```
.location-section i {  
  font-size: 24px;  
  margin-right: 15px;  
}
```

```
.information-div {  
  display: flex;  
  flex-direction: column;  
  align-items: flex-start;  
}
```

```
.information-div p, .information-div h2 {  
    margin: 0;  
}
```

```
.information-div p {  
    font-size: 14px;  
    color: #666;  
}
```

```
.information-div h2 {  
    font-size: 20px;  
    color: #333;  
}
```

```
.bx-transfer {  
    font-size: 35px;  
    margin-top: 15px;  
}
```

```
#search-button {  
    background-color: rgb(46, 192, 46);  
    color: #ffffff;  
    padding: 20px 20px;  
    border: none;
```

```

border-radius: 5px;

font-size: 25px;

cursor: pointer;

width: 700px;

margin: 15px auto;

}

```

```

.bx-right-arrow-alt {

font-size: 24px;

}

```

