

**International University**

School of Computer Science and Engineering

**Web Application Development**

**Laboratory**

**IT093IU**

**Lab #2**

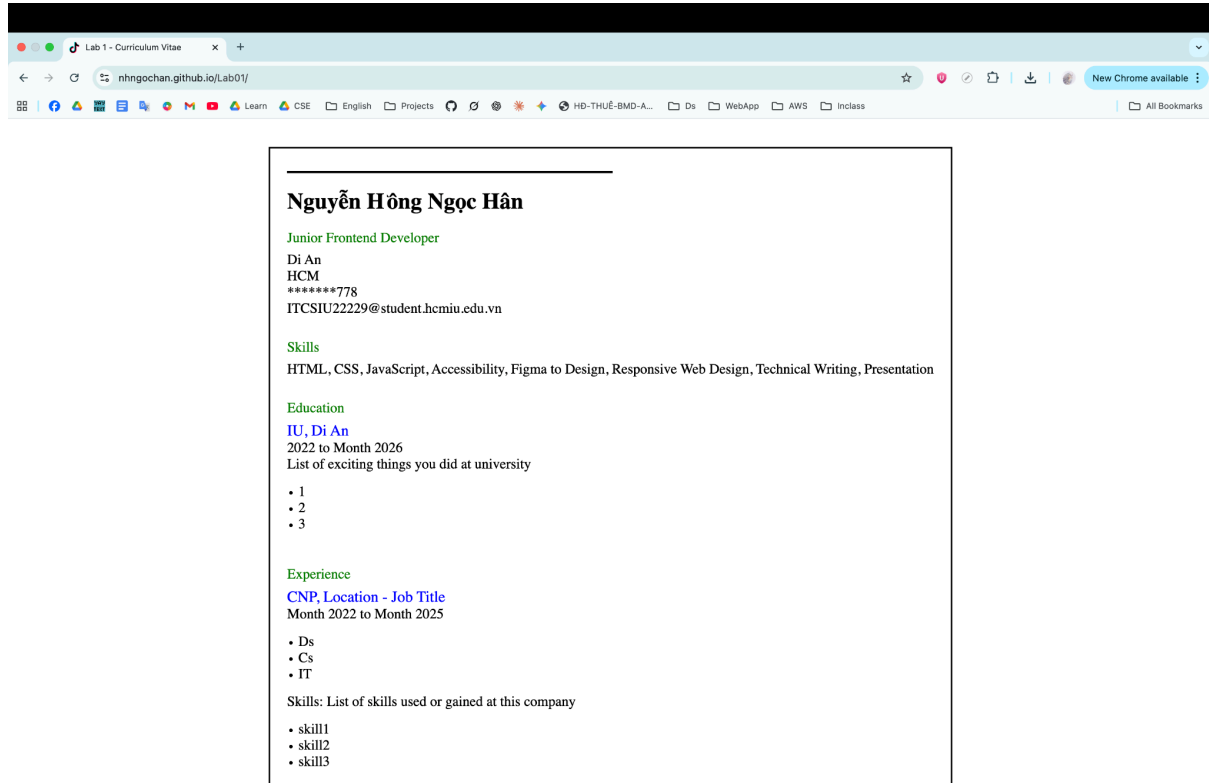
**Submitted by**

**Nguyễn Hồng Ngọc Hân - ITCSIU22229**

Exercise 1 (15 pt): Deploy the personal web pages you which do on previous lab to the github.io and submit the link via your report.

**SOLUTION:**

**OUTPUT:**



Link: <https://nhngochan.github.io/Lab01/>

Exercise 2:

**SOLUTION:**

```

1  <!DOCTYPE html>
2  <html lang="en">
3    <head>
4      <meta charset="UTF-8" />
5      <meta name="viewport" content="width=device-width, initial-scale=1.0" />
6      <title>Exercise 1</title>
7
8      <!-- Bootstrap CSS -->
9      <link
10        rel="stylesheet"
11        href="https://cdn.jsdelivr.net/npm/bootstrap@4.6.2/dist/css/bootstrap.min.css"
12        integrity="sha384-x0oLHfLEh07PJGoPkLv1IbcEPTNtaed2xpHsD9ESMhqIYd0nLMwNLD69Npy4HI+N"
13        crossorigin="anonymous"
14      />
15      <script src="https://cdn.jsdelivr.net/npm/bootstrap@4.6.2/dist/js/bootstrap.bundle.min.js"></script>
16
17      <!-- Custom CSS -->
18      <link rel="stylesheet" href="./survey.css" />
19    </head>
20
21    <body>
22      <div class="container mt-4 p-4 survey">
23        <div class="text-left">
24          
25        </div>
26
27        <h2 class="survey-title text-left">Survey</h2>
28        <p class="text-left mb-4">
29          If you have a moment, we'd appreciate it if you would fill out this
30          survey.
31        </p>
32
33        <form>
34          <!-- P1 -->
35          <fieldset class="mb-3">
36            <legend>Your information:</legend>
37
38            <div class="mb-2 row">
39              <label for="fname" class="col-sm-3 col-form-label">
40                First Name</label>
41              <div class="col-sm-5">
42                <input type="text" id="fname" class="form-control" />
43              </div>
44            </div>
45
46            <div class="mb-2 row">
47              <label for="lname" class="col-sm-3 col-form-label">Last Name</label>
48              <div class="col-sm-5">
49                <input
50                  type="text"
51                  id="lname"
52                  class="form-control form-control-sm"
53                />
54              </div>
55            </div>
56
57            <div class="mb-2 row">
58              <label for="email" class="col-sm-3 col-form-label">Email</label>
59              <div class="col-sm-5">
60                <input
61                  type="email"
62                  id="email"
63                  class="form-control form-control-sm"
64                />
65              </div>
66            </div>
67
68            <div class="mb-2 row">
69              <label for="dob" class="col-sm-3 col-form-label">
70                Date of Birth</label>
71              <div class="col-sm-5">
72                <input

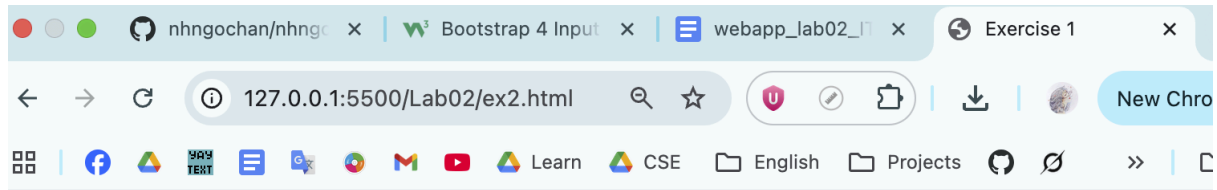
```


```

1      <!-- P2 -->
2      <fieldset class="mb-3">
3          <legend>How did you hear about us?</legend>
4          <div class="form-check form-check-inline">
5              <input
6                  class="form-check-input"
7                  type="radio"
8                  name="source"
9                  id="search"
10                 checked
11             />
12             <label class="form-check-label" for="search">Search engine</label>
13         </div>
14         <div class="form-check form-check-inline">
15             <input
16                 class="form-check-input"
17                 type="radio"
18                 name="source"
19                 id="word"
20             />
21             <label class="form-check-label" for="word">Word of mouth</label>
22         </div>
23         <div class="form-check form-check-inline">
24             <input
25                 class="form-check-input"
26                 type="radio"
27                 name="source"
28                 id="social"
29             />
30             <label class="form-check-label" for="social">Social Media</label>
31         </div>
32         <div class="form-check form-check-inline">
33             <input
34                 class="form-check-input"
35                 type="radio"
36                 name="source"
37                 id="other"
38             />
39             <label class="form-check-label" for="other">Other</label>
40         </div>
41     </fieldset>
42
43     <!-- P3 -->
44     <fieldset class="mb-3">
45         <legend>
46             Would you like to receive announcements about new CDs and special
47             offers?
48         </legend>
49
50         <div class="form-check">
51             <input type="checkbox" id="like" class="form-check-input" />
52             <label class="form-check-label" for="like">
53                 >YES, I'd like that.</label>
54             >
55         </div>
56
57         <div class="form-check">
58             <input
59                 type="checkbox"
60                 id="emailAnnouncements"
61                 class="form-check-input"
62             />
63             <label class="form-check-label" for="emailAnnouncements">
64                 >YES, please send me email announcements.</label>
65             >
66         </div>
67
68         <div class="mt-2">
69             <label for="contact" class="form-label">
70                 >Please contact me by:</label>
71             >
72             <select id="contact" class="form-select form-select-sm w-auto">
73                 <option>Email or postal mail</option>
74                 <option>Email only</option>
75                 <option>Postal mail only</option>
76             </select>
77         </div>
78     </fieldset>
79
80     <!-- P4 -->
81     <button type="submit" class="btn btn-light btn-outline-primary">
82         Submit
83     </button>
84 </form>
85 </div>
86 </body>
87 </html>
88
89
90

```

## OUTPUT:





## Survey

If you have a moment, we'd appreciate it if you would fill out this survey.

**Your information:**

**First Name**

**Last Name**

**Email**

**Date of Birth**

**How did you hear about us?**

☒ Search engine ☐ Word of mouth ☐ Social Media ☐ Other

**Would you like to receive announcements about new CDs and special offers?**

☐ YES, I'd like that.

☐ YES, please send me email announcements.

**Please contact me by:**

## Exercise 3:

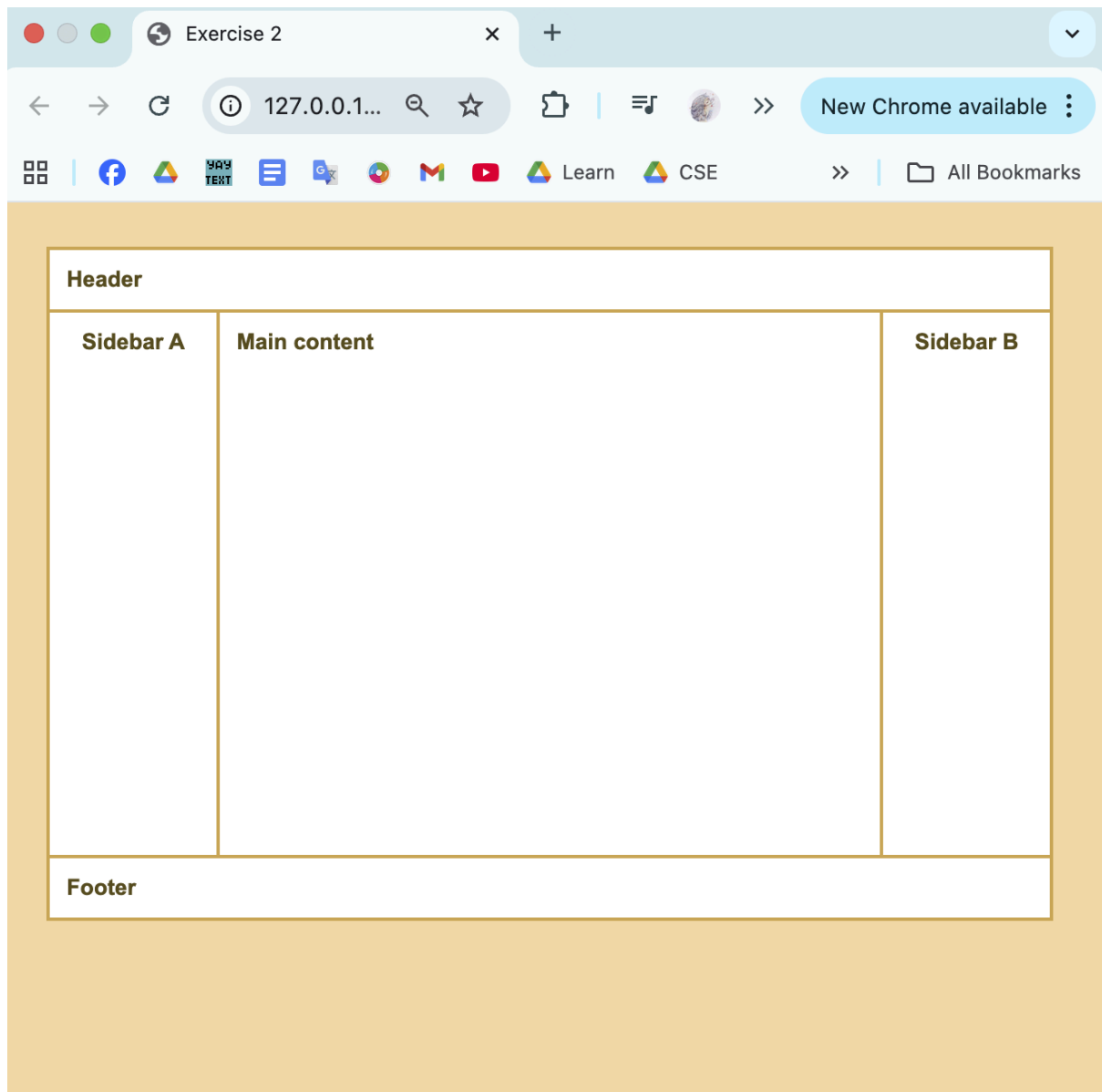
### SOLUTION:

```
Lab02 > ex2.html > ...
1  <!DOCTYPE html>
2  <html lang="en">
3    <head>
4      <meta charset="UTF-8" />
5      <meta name="viewport" content="width=device-width, initial-scale=1.0" />
6      <title>Exercise 2</title>
7      <link rel="stylesheet" href="./layout.css" />
8    </head>
9
10   <body>
11     <div class="container">
12       <header>Header</header>
13
14       <div class="content">
15         <div class="sidebar left">Sidebar A</div>
16         <div class="main">Main content</div>
17         <div class="sidebar right">Sidebar B</div>
18       </div>
19
20       <footer>Footer</footer>
21     </div>
22   </body>
23 </html>
```



```
1  body {
2    font-family: Arial;
3    font-size: 20px;
4    background-color: #f9dba6;
5    justify-content: center;
6    margin: 0;
7    padding: 40px 0 0 40px;
8  }
9
10
11  .container {
12    width: 900px;
13    background-color: #fff;
14    border: 3px solid #d6a84f;
15    display: flex;
16    flex-direction: column;
17    min-height: 600px;
18  }
19
20
21  header,
22  footer {
23    background-color: #fff;
24    text-align: left;
25    padding: 15px 0 15px 15px;
26    font-weight: bold;
27    color: #5b4b17;
28  }
29
30  /* 3-column */
31  .content {
32    display: flex;
33    flex: 1;
34    border-top: 3px solid #d6a84f;
35    border-bottom: 3px solid #d6a84f;
36  }
37
38
39  /* Sidebar Left/Right */
40  .sidebar {
41    width: 120px;
42    background-color: #fff;
43    padding: 15px;
44    text-align: center;
45    font-weight: bold;
46    color: #5b4b17;
47  }
48
49  .sidebar.left {
50    border-right: 3px solid #d6a84f;
51  }
52  .sidebar.right {
53    border-left: 3px solid #d6a84f;
54  }
55
56
57  /* Main */
58  .main {
59    flex: 1;
60    padding: 15px;
61    font-weight: bold;
62    color: #5b4b17;
63  }
```

## OUTPUT:



## Explain:

This HTML and CSS code uses Flexbox to create a three-column webpage layout. The HTML structure is made up of a content section with two sidebars and a main content area in the middle and a main container with a header at the top and a footer at the bottom. The body centers the layout by adjusting the font, padding, and background color in the CSS. The container is a flex container that stacks its elements (header, content, and footer) vertically and has a column direction. Both the header and the footer have the same design elements, including bold text, padding, and dark gold.

There are two display: flex declarations in this layout, each serving a different purpose. The first one is applied to the .container, which arranges its child elements



vertically in a column with flex-direction: column for the header, content, and footer. The second one is applied to the .content section, which organizes its child elements (left sidebar, main content, and right sidebar) horizontally in a single row. Both flex containers work together: the outer flex (.container) controls the overall vertical structure of the page, while the inner flex (.content) creates a horizontal three-column layout. The sidebars have fixed widths, and the main content area uses flex: 1 to expand and fill the remaining space between them.

Exercise 4:

***SOLUTION:***

```

1  <!DOCTYPE html>
2  <html lang="en">
3    <head>
4      <meta charset="UTF-8" />
5      <meta name="viewport" content="width=device-width, initial-scale=1.0" />
6      <title>Exercise 3</title>
7      <link rel="stylesheet" href="./townhall.css" />
8    </head>
9    <body>
10     <div class="container">
11       <header>
12         
13         <div class="header-text">
14           <h1>San Joaquin Valley Town Hall</h1>
15           <p>Bringing cutting-edge speakers to the valley</p>
16         </div>
17       </header>
18
19       <div class="main">
20         <section class="left">
21           <h2>This season's guest speakers</h2>
22           <ul>
23             <li><strong>October:</strong> <a href="#">David Brancaccio</a></li>
24             <li>
25               <strong>November:</strong> <a href="#">Andrew Ross Sorkin</a>
26             </li>
27             <li><strong>January:</strong> <a href="#">Amy Chua</a></li>
28             <li><strong>February:</strong> <a href="#">Scott Sampson</a></li>
29             <li><strong>March:</strong> <a href="#">Carlos Eire</a></li>
30             <li><strong>April:</strong> <a href="#">Ronan Tynan</a></li>
31           </ul>
32
33           <h2 id="Looking">Looking for a unique gift?</h2>
34           <p>
35             Town Hall has the answer. For only $100, you can get a book of
36             tickets for all of the remaining speakers. And the bargain includes
37             a second book of tickets for a companion.
38           </p>
39           <p>
40             Or, for $50, you can give yourself the gift of our speakers, and
41             still get an extra ticket for a companion, but for just one of the
42             events.
43           </p>
44           <p>See you at the next show?</p>
45           <p>
46             <strong id="contact">Contact us by phone</strong> at (559) 555-1212
47             for ticket information.
48           </p>
49         </section>
50
51         <aside class="right">
52           <h3>Lecture notes</h3>
53           <h4>Event change for November</h4>
54           <p>
55             Town Hall is pleased to announce the addition of award-winning
56             author Andrew Ross Sorkin. The appearance of previously scheduled
57             speaker, Greg Mortenson, has been postponed.
58           </p>
59           <h4>Lecture day, time, and location</h4>
60           <p>
61             All one-hour lectures are on the second Wednesday of the month
62             beginning at 10:30 a.m. at William Saroyan Theatre, 700 M Street,
63             Fresno, CA.
64           </p>
65         </aside>
66       </div>
67
68       <footer>
69         <p>&copy; Copyright 2022 San Joaquin Valley Town Hall.</p>
70       </footer>
71     </div>
72   </body>
73 </html>
74

```

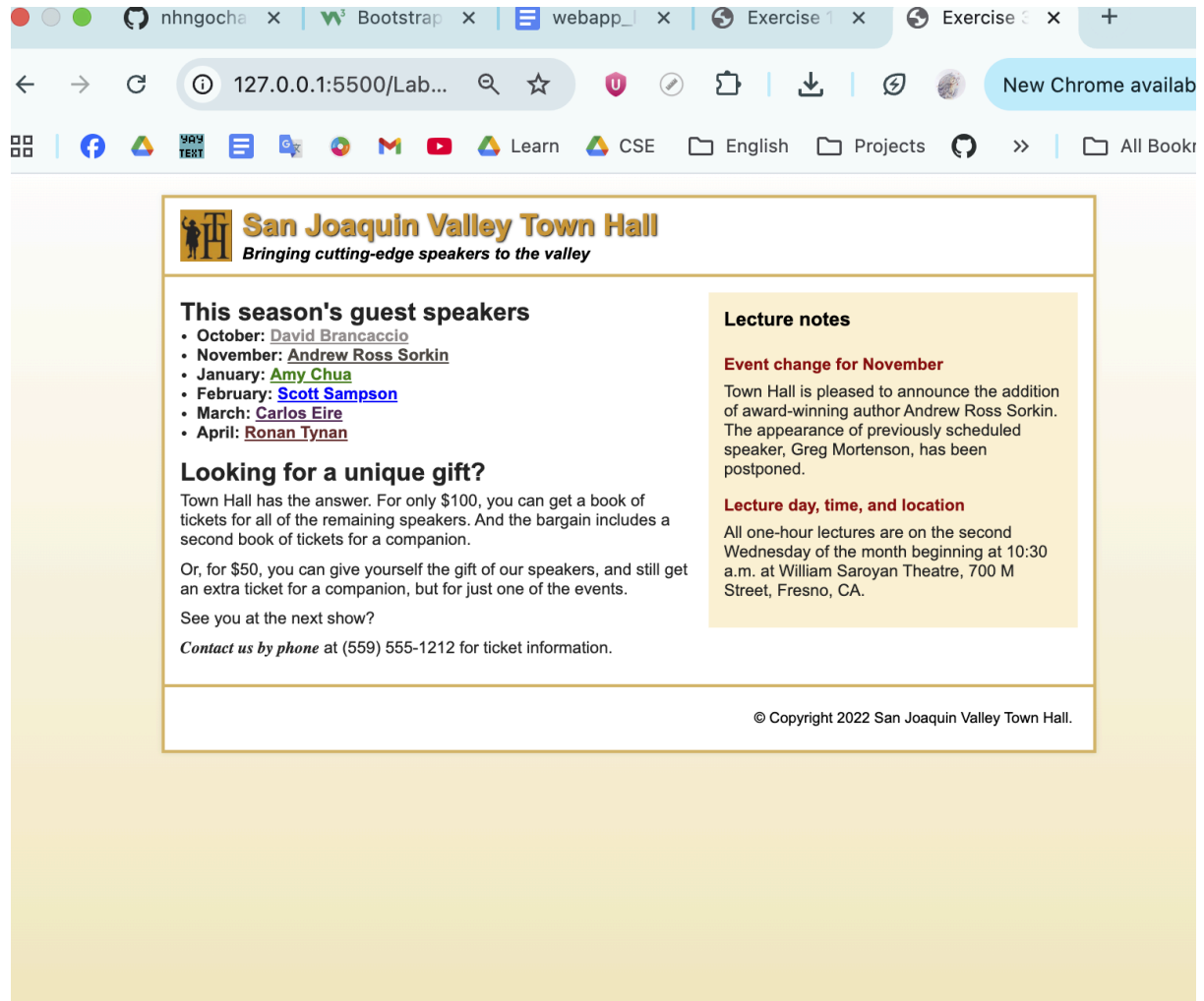


```
1  body {
2    font-family: Arial;
3    padding: 0;
4    color: #222;
5    background: linear-gradient(to bottom, #ffffff, #f0d88c);
6    height: 100vh;
7  }
8
9  .container {
10   width: 900px;
11   margin: 20px auto;
12   border: 3px solid #e1b864;
13   background-color: #ffffff;
14   box-shadow: 0 0 5px rgba(0,0,0,0.1);
15 }
16
17 /* Header */
18 header {
19   display: flex;
20   align-items: center;
21   background-color: #fff;
22   padding: 10px 15px;
23   border-bottom: 3px solid #e1b864;
24 }
25
26 .logo {
27   width: 50px;
28   height: 50px;
29   margin-right: 10px;
30 }
31 }
32
33 .header-text h1 {
34   margin: 0;
35   font-size: 1.8em;
36   color: #de982f;
37   text-shadow: 1px 1px 2px #000;
38 }
39
40 .header-text p {
41   margin: 2px 0 0;
42   color: #000;
43   font-style: italic;
44   font-weight: bold;
45 }
46
47 .main {
48   display: flex;
49   justify-content: space-between;
50   padding: 15px;
51 }
52
53 /* Left sidebar */
54 .left {
55   flex: 1.5;
56   padding-right: 20px;
57 }
58
59 .left h2 {
60   color: #222;
61   margin: 5px 0 0 0;
62 }
```



```
1
2 .left #Looking {
3     margin-top: 15px;
4 }
5
6 .left p {
7     margin: 5px 0px 10px;
8 }
9
10 .left ul {
11     margin: 0px;
12     padding: 0 0 0 16px;
13 }
14
15 ul li:nth-child(1) a { color: rgb(150, 142, 142); font-weight: 800; }
16 ul li:nth-child(2) a { color: rgb(75, 72, 66); font-weight: 800; }
17 ul li:nth-child(3) a { color: green; font-weight: 800; }
18 ul li:nth-child(4) a { color: blue; font-weight: 800; }
19 ul li:nth-child(5) a { color: rgb(89, 39, 89); font-weight: 800; }
20 ul li:nth-child(6) a { color: rgb(119, 41, 41); font-weight: 800; }
21
22 .left #contact{
23     font-style: italic;
24     font-family: Times;
25 }
26
27 /* Right sidebar */
28 .right {
29     flex: 1;
30     background-color: #fff3d4;
31     padding: 10px 15px;
32     height: fit-content;
33 }
34
35 .right h3 {
36     font-weight: bold;
37     color: #000;
38     padding: 5px 0px;
39     margin-top: 0;
40 }
41
42 .right h4{
43     color: rgb(160, 9, 9);
44     margin: 0 0 8px 0;
45 }
46
47 .right p{
48     margin: 0 0 16px 0;
49 }
50
51 /* Footer */
52 footer {
53     background-color: #fff;
54     border-top: 3px solid #e1b864;
55     text-align: right;
56     padding: 8px 20px;
57     font-size: 0.9em;
58     color: black;
59 }
60
```

## OUTPUT:



## Explain:

This HTML and CSS code creates a two-column webpage layout using Flexbox. The page includes a header with a logo and title, a main section divided into a left content area and a right sidebar, and a footer. There are two display: flex properties in use: one in the header, which places the logo and text side by side and centers them vertically, and another in the main section, which arranges the left and right columns horizontally. The left section is wider (flex: 1.5), while the right sidebar is smaller (flex: 1). The container is centered with a fixed width, border, and shadow, and the background uses a gradient for visual appeal. Together, these flex containers create a clean, balanced, and well-structured webpage layout.