

Assignment – 1

Assignment Date	29 September 2022
Student Name	Tony Christopher J
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Maximum Marks	2 Marks

Question-1:

Try and execute the programs below

- A. Chessboard
B. Tic-tac-toe

Solution:

A. Source code for Chessboard

The image displays a web browser window with a single tab titled "chessBoard.html". The browser's address bar shows the file path "file:///C:/Users/.../chessBoard.html". The main content area of the browser shows a simple chessboard with alternating black and white squares. The source code of the page is visible in the bottom panel, which is titled "View Source". The code is as follows:

```
<html>
<head>
<meta charset="UTF-8">
<title>Chessboard using Pure CSS and HTML</title>
<style type="text/css">

.chessboard {
width: 640px;
height: 640px;
margin: 20px;
border: 25px solid #333;
}

.black {
float: left;
width: 80px;
height: 80px;
background-color: #999;
font-size: 50px;
text-align: center;
display: table-cell;
vertical-align: middle;
}

.white {
float: left;
width: 80px;
height: 80px;
background-color: #fff;
font-size: 50px;
text-align: center;
display: table-cell;
vertical-align: middle;
}

</style>
</head>
<body>
<div class="chessboard">
<!-- list -->
</div>
```

The screenshot shows a web browser window with the address bar displaying "chessBoard.html". The browser's developer tools are open, showing the HTML source code of the page. The code is a series of nested <div> elements, each with a class attribute. The classes are used to represent the board's state, including the pieces and their positions. The code is structured to allow for future moves and game state changes.

```
44 <div class="white"><#9820;</div>
45 <div class="black"><#9822;</div>
46 <div class="white"><#9821;</div>
47 <div class="black"><#9819;</div>
48 <div class="white"><#9818;</div>
49 <div class="black"><#9821;</div>
50 <div class="white"><#9822;</div>
51 <div class="black"><#9820;</div>
52 <!-- 2nd -->
53 <div class="black"><#9821;</div>
54 <div class="white"><#9821;</div>
55 <div class="black"><#9821;</div>
56 <div class="white"><#9821;</div>
57 <div class="black"><#9821;</div>
58 <div class="white"><#9821;</div>
59 <div class="black"><#9821;</div>
60 <div class="white"><#9821;</div>
61 <!-- 3th -->
62 <div class="white"><#9821;</div>
63 <div class="black"><#9821;</div>
64 <div class="white"><#9821;</div>
65 <div class="black"><#9821;</div>
66 <div class="white"><#9821;</div>
67 <div class="black"><#9821;</div>
68 <div class="white"><#9821;</div>
69 <div class="black"><#9821;</div>
70 <!-- 4th -->
71 <div class="black"><#9821;</div>
72 <div class="white"><#9821;</div>
73 <div class="black"><#9821;</div>
74 <div class="white"><#9821;</div>
75 <div class="black"><#9821;</div>
76 <div class="white"><#9821;</div>
77 <div class="black"><#9821;</div>
78 <div class="white"><#9821;</div>
79 <!-- 5th -->
80 <div class="white"><#9821;</div>
81 <div class="black"><#9821;</div>
82 <div class="white"><#9821;</div>
83 <div class="black"><#9821;</div>
84 <div class="white"><#9821;</div>
85 <div class="black"><#9821;</div>
86 <div class="white"><#9821;</div>
87 <div class="black"><#9821;</div>
```

The status bar at the bottom of the browser window shows the following information:

- Hyper Text Markup Language file
- length: 2,772 lines: 117
- Ln: 85 Col: 26 Pos: 1,891
- Windows (CR LF)
- UTF-8
- INS

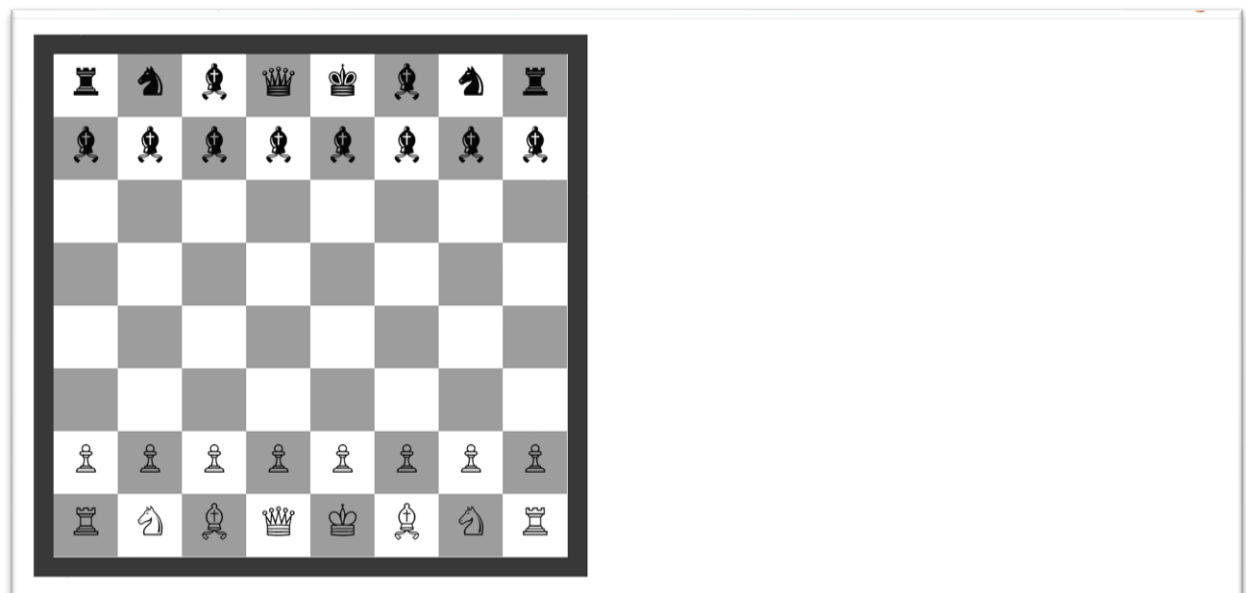
```

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
chessBoard.html
75 <div class="black"></div>
76 <div class="white"></div>
77 <div class="black"></div>
78 <div class="white"></div>
79 <!-- 5th -->
80 <div class="white"></div>
81 <div class="black"></div>
82 <div class="white"></div>
83 <div class="black"></div>
84 <div class="white"></div>
85 <div class="black"></div>
86 <div class="white"></div>
87 <div class="black"></div>
88 <!-- 6th -->
89 <div class="black"></div>
90 <div class="white"></div>
91 <div class="black"></div>
92 <div class="white"></div>
93 <div class="black"></div>
94 <div class="white"></div>
95 <div class="black"></div>
96 <div class="white"></div>
97 <!-- 7th -->
98 <div class="white">#9817</div>
99 <div class="black">#9817</div>
100 <div class="white">#9817</div>
101 <div class="black">#9817</div>
102 <div class="white">#9817</div>
103 <div class="black">#9817</div>
104 <div class="white">#9817</div>
105 <div class="black">#9817</div>
106 <!-- 8th -->
107 <div class="black">#9814</div>
108 <div class="white">#9816</div>
109 <div class="black">#9815</div>
110 <div class="white">#9813</div>
111 <div class="black">#9812</div>
112 <div class="white">#9815</div>
113 <div class="black">#9816</div>
114 <div class="white">#9814</div>
115 </div>
116 </body>
117 </html>

```

Hyper Text Markup Language file length: 2,772 lines: 117 Ln: 117 Col: 8 Pos: 2,773 Windows (CR LF) UTF-8 INS

Output for Chessboard



B. Source code for Tic-tac-toe

```

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
tic-tac-toe.html
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>tic-tac-toe</title>
8   <link rel="stylesheet" href="style.css">
9 </head>
10 <body>
11   <h1>Tic Tac Toe</h1>
12   <hr>
13   <hr>
14   <div id="board">
15
16   </div>
17   <script src="script.js"></script>
18 </body>
19 </html>

```

Hyper Text Markup Language file length: 446 lines: 19 Ln: 1 Col: 1 Pos: 1 Windows (CR LF) UTF-8 INS

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
body{
  font-family: Arial, Helvetica, sans-serif;
  text-align: center;
}
hr{
  width: 500px;
  height: 3px;
  background-color: black;
}
#board{
  width: 450px;
  height: 450px;
  margin: 0 auto;
  display: flex;
  flex-wrap: wrap;
}
.tile{
  width: 147px;
  height: 147px;
  font-size: 150px;
  display: flex;
  justify-content: center;
  align-items: center;
}
.horizontal-line{
  border-bottom: 3px solid black;
}
.vertical-line{
  border-right: 3px solid black;
}
.winner{
  background-color: lightgray;
  color: red;
}
```

Cascade Style Sheets File length: 602 lines: 35 Ln: 1 Col: 1 Pos: 1 Windows (CR LF) UTF-8 INS

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
var board;
var player0 = "o";
var playerX = "x";
var currPlayer = player0;
var gameOver = false;

window.onload = function(){
  setGame();
}

function setGame(){
  board = [
    [' ',' ',' '],
    [' ',' ',' '],
    [' ',' ',' ']
  ];
  for(let r=0; r<3; r++){
    for(let c=0; c<3; c++){
      let tile = document.createElement("div");
      tile.id = r.toString() + "-" + c.toString();
      tile.classList.add("tile");
      if (r==0 || r==2){
        tile.classList.add("horizontal-line");
      }
      if (c==0 || c==2){
        tile.classList.add("vertical-line");
      }
      tile.addEventListener("click", setTile);
      document.getElementById("board").append(tile);
    }
  }
}

function setTile(){
  if(gameOver){
    return;
  }
  let coords = this.id.split("-");
  let r = parseInt(coords[0]);
  let c = parseInt(coords[1]);
  if (board[r][c] != ' '){
    return;
  }
}
```

JavaScript file length: 2,835 lines: 99 Ln: 1 Col: 1 Pos: 1 Windows (CR LF) UTF-8 INS

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
    return;
  }
  board[r][c] = currPlayer;
  this.innerText = currPlayer;
  if (currPlayer==player0){
    currPlayer = playerX;
  }
  else{
    currPlayer = player0;
  }
  checkWinner();
}

function checkWinner(){
  for(let r=0; r<3; r++){
    if (board[r][0] == board[r][1] && board[r][1] == board[r][2] && board[r][0] != ' '){
      for(let i=0; i<3; i++){
        let tile = document.getElementById(r.toString() + "-" + i.toString());
        tile.classList.add("winner");
      }
      gameOver = true;
      return;
    }
  }
  for(let c=0; c<3; c++){
    if (board[0][c] == board[1][c] && board[1][c] == board[2][c] && board[0][c] != ' '){
      for(let i=0; i<3; i++){
        let tile = document.getElementById(i.toString() + "-" + c.toString());
        tile.classList.add("winner");
      }
      gameOver = true;
      return;
    }
  }
  if (board[0][0] == board[1][1] && board[1][1] == board[2][2] && board[0][0] != ' '){
    for(let i=0; i<3; i++){
      let tile = document.getElementById(i.toString() + "-" + c.toString());
      tile.classList.add("winner");
    }
    gameOver = true;
    return;
  }
  if (board[0][2] == board[1][1] && board[1][1] == board[2][0] && board[0][2] != ' '){
    for(let i=0; i<3; i++){
      let tile = document.getElementById(i.toString() + "-" + c.toString());
      tile.classList.add("winner");
    }
    gameOver = true;
    return;
  }
}
```

JavaScript file length: 2,835 lines: 99 Ln: 85 Col: 1 Pos: 2,369 Windows (CR LF) UTF-8 INS

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
[scripts]
68 for(let c=0;c<3;c++){
69   if(board[0][c] == board[1][c] && board[1][c] == board[2][c] && board[c][0] != ' '){
70     for(let i=0;i<3;i++){
71       let tile = document.getElementById(i.toString() + "-" + c.toString());
72       tile.classList.add("winner");
73     }
74     gameOver = true;
75     return;
76   }
77 }
78 if(board[0][0] == board[1][0] && board[1][0] == board[2][0] && board[0][0] != ' '){
79   for(let i=0;i<3;i++){
80     let tile = document.getElementById(i.toString() + "-" + 0.toString());
81     tile.classList.add("winner");
82   }
83   gameOver = true;
84   return;
85 }
86 if(board[0][2] == board[1][2] && board[1][2] == board[2][2] && board[0][2] != ' '){
87   for(let i=0;i<3;i++){
88     let tile = document.getElementById(i.toString() + "-" + 2.toString());
89     tile.classList.add("winner");
90   }
91   tile = document.getElementById("1-1");
92   tile.classList.add("winner");
93   tile = document.getElementById("2-0");
94   tile.classList.add("winner");
95 }
96 }
97 }
98 }
99 }
```

JavaScript file length: 2,835 lines: 99 Ln: 68 Col: 28 Pos: 1,690 Windows (CR LF) UTF-8 INS

Output for Tic-tac-toe

Tic Tac Toe		
O	X	O
X	O	X
O	X	O

Question-2:

Design a webpage which displays your timetable using tables in HTML

Solution:

Source code for Timetable

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
<!DOCTYPE html>
<html>
<body>
<h1>TIME TABLE</h1>
<table border="5" cellpadding="0" cellspacing="0" align="center">
<!--<caption>timetable</caption-->
<tr>
<td align="center" height="50"
width="100"><br>
<b>Day/Period</b></td>
<td align="center" height="50"
width="100">
<b>I</b><br>9:30-10:20</td>
<td align="center" height="50"
width="100">
<b>II</b><br>10:20-11:10</td>
<td align="center" height="50"
width="100">
<b>III</b><br>11:10-12:00</td>
<td align="center" height="50"
width="100">
<b>IV</b><br>12:40-1:30</td>
<td align="center" height="50"
width="100">
<b>V</b><br>1:30-2:20</td>
<td align="center" height="50"
width="100">
<b>VI</b><br>2:20-3:10</td>
<td align="center" height="50"
width="100">
<b>VII</b><br>3:10-4:00</td>
</tr>
</table>
</body>
</html>
```

Hyper Text Markup Language file length: 3,069 lines: 122 Ln: 1 Col: 16 Pos: 16 Windows (CR LF) UTF-8 INS

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
</tr>
<tr>
<td align="center" height="50">
<b>Monday</b></td>
<td align="center" height="50">Eng</td>
<td align="center" height="50">Mat</td>
<td align="center" height="50">Che</td>
<td rowspan="6" align="center" height="50">
<h2>Lcbr>Ucbr>Ncbr>Ccbr>H</h2>
</td>
<td colspan="3" align="center"
height="50">LAB</td>
<td align="center" height="50">Phy</td>
</tr>
<tr>
<td align="center" height="50">
<b>Tuesday</b></td>
<td align="center" height="50">Eng</td>
<td align="center" height="50">Mat</td>
<td align="center" height="50">Che</td>
<td align="center" height="50">SPORTS</td>
</tr>
<tr>
<td align="center" height="50">
<b>Wednesday</b></td>
<td align="center" height="50">Mat</td>
<td align="center" height="50">Phy</td>
<td align="center" height="50">Eng</td>
<td align="center" height="50">Che</td>
<td colspan="3" align="center"
height="50">LIBRARY</td>
</tr>
<tr>
<td align="center" height="50">
<b>Thursday</b></td>
<td align="center" height="50">Eng</td>
<td align="center" height="50">Mat</td>
<td align="center" height="50">Che</td>
<td align="center" height="50">Phy</td>
</tr>
<tr>
<td align="center" height="50">
<b>Friday</b></td>
<td align="center" height="50">Eng</td>
<td align="center" height="50">Mat</td>
<td align="center" height="50">Che</td>
<td align="center" height="50">Phy</td>
</tr>
<tr>
<td align="center" height="50">
<b>Saturday</b></td>
<td align="center" height="50">Eng</td>
<td align="center" height="50">Mat</td>
<td align="center" height="50">Che</td>
<td align="center" height="50">Phy</td>
</tr>
</table>
</body>
</html>
```

Hyper Text Markup Language file length: 3,069 lines: 122 Ln: 44 Col: 18 Pos: 980 Windows (CR LF) UTF-8 INS

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
</tr>
<tr>
<td align="center" height="50">
<b>Thursday</b></td>
<td align="center" height="50">Phy</td>
<td align="center" height="50">Eng</td>
<td align="center" height="50">Che</td>
<td colspan="3" align="center"
height="50">LAB</td>
<td align="center" height="50">Mat</td>
</tr>
<tr>
<td align="center" height="50">
<b>Friday</b></td>
<td align="center" height="50">Eng</td>
<td align="center" height="50">Mat</td>
<td align="center" height="50">Che</td>
<td align="center" height="50">Phy</td>
</tr>
<tr>
<td align="center" height="50">
<b>Saturday</b></td>
<td align="center" height="50">Eng</td>
<td align="center" height="50">Mat</td>
<td align="center" height="50">Che</td>
<td align="center" height="50">Phy</td>
</tr>
<tr>
<td align="center" height="50">
<b>Sunday</b></td>
<td align="center" height="50">Eng</td>
<td align="center" height="50">Mat</td>
<td align="center" height="50">Che</td>
<td align="center" height="50">Phy</td>
</tr>
</table>
</body>
</html>
```

Hyper Text Markup Language file length: 3,069 lines: 122 Ln: 82 Col: 14 Pos: 2,056 Windows (CR LF) UTF-8 INS

Output for Timetable

TIME TABLE

Day/Period	I 9:30-10:20	II 10:20-11:10	III 11:10-12:00	12:00-12:40	IV 12:40-1:30	V 1:30-2:20	VI 2:20-3:10	VII 3:10-4:00
Monday	Eng	Mat	Che	L U N C H	LAB			Phy
Tuesday	LAB				Eng	Che	Mat	SPORTS
Wednesday	Mat	phy	Eng		Che	LIBRARY		
Thursday	Phy	Eng	Che		LAB			Mat
Friday	LAB				Mat	Che	Eng	Phy
Saturday	Eng	Che	Mat		SEMINAR			SPORTS

Question-3:

Design a registration webpage using HTML, CSS and JavaScript

Solution:

Source code for registration webpage

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
home.html
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>website</title>
8   <link rel="stylesheet" href="style.css">
9 </head>
10 <body>
11   <div class="main">
12     <div class="navbar">
13       <div class="icon">
14         <img alt="Hotel logo" data-bbox="140 620 160 640"/>
15       </div>
16       <div class="menu">
17         <ul>
18           <li><a href="#">Home</a></li>
19           <li><a href="#">About</a></li>
20           <li><a href="#">Service</a></li>
21           <li><a href="#">Contact</a></li>
22         </ul>
23       </div>
24     </div>
25     <div class="food">
26       <h3>Today's Special</h3>
27       <ol>
28         <li>Biryani</li>
29         <li>Chicken Rice</li>
30         <li>Noodles</li>
31         <li>Barotha</li>
32         <li>Pizza</li>
33       </ol>
34     </div>
35     <div class="offer">
36       <h2>Today's offer</h2>
37       <ol>
38         <li>1.Buy 1 Large pizza ***** Get 100ml 7up free</li>
39         <li>1.Buy 1 bucket biryani ***** Get 1 lollipop free</li>
40         <li>1.Buy 10 paratha ***** Get 1 paratha free</li>
41       </ol>
42     </div>
43   </div>
44 </body>
45 </html>
```

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
home.html
19 <li><a href="#">About</a></li>
20 <li><a href="#">Service</a></li>
21 <li><a href="#">Contact</a></li>
22
23 </ul>
24 </div>
25
26 <div class="food">
27 <h3>Today's Special</h3>
28 <ol>
29 <li>Biryani</li>
30 <li>Chicken Rice</li>
31 <li>Noodles</li>
32 <li>parotha</li>
33 <li>pizza</li>
34 </ol>
35 </div>
36 <div class="offer">
37 <h3>Today's offer</h3>
38 <ol>
39 <li>1.Buy 1 Large pizza ***** Get 100ml 7up free</li>
40 <li>1.Buy 1 bucket biryani ***** Get 1 lollipop free</li>
41 <li>1.Buy 10 paratha ***** Get 1 paratha free</li>
42 </ol>
43 </div>
44 <div class="contact">
45 <h3>Feedback form</h3>
46 <label for="name">Name</label>
47 <input type="text">
48 <label for="Feedback">Feedback</label>
49 <input type="text">
50 <button type="submit"> <a href="feedback form.html">submit </a></button>
51 </div>
52
53 </div>
54 <script src="/script1.js"></script>
55 </body>
56 </html>
Hyper Text Markup Language file length: 1940 lines: 56 Ln: 19 Col: 52 Pos: 606 Windows (CR LF) UTF-8 INS
```

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
form.html
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <meta charset="UTF-8">
5 <meta http-equiv="X-UA-Compatible" content="IE=edge">
6 <meta name="viewport" content="width=device-width, initial-scale=1.0">
7 <title>Form</title>
8 <script type="text/javascript" src="script.js"></script>
9 </head>
10 <body>
11 <div id="error"></div>
12 <form id="form" action="/" method="GET">
13 <div>
14 <label for="name">Name</label>
15 <input id="name" name="name" type="text" required>
16 </div>
17 <div>
18 <label for="password">Password</label>
19 <input id="password" name="password" type="password" required>
20 </div>
21 <div>
22 <button type="submit"> <a href="home.html">Submit</a></button>
23 </div>
24 </form>
25 </body>
26 </html>
Hyper Text Markup Language file length: 769 lines: 26 Ln: 1 Col: 1 Pos: 1 Windows (CR LF) UTF-8 INS
```

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
feedback form.html
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <meta charset="UTF-8">
5 <meta http-equiv="X-UA-Compatible" content="IE=edge">
6 <meta name="viewport" content="width=device-width, initial-scale=1.0">
7 <title>Feedback</title>
8 </head>
9 <body>
10 <div>
11 <h1>your feedback was submitted successfully</h1>
12 </div>
13 </body>
14 </html>
Hyper Text Markup Language file length: 349 lines: 14 Ln: 1 Col: 1 Pos: 1 Windows (CR LF) UTF-8 INS
```

CSS File

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
form.html feedback form.html style.css
1 {
2   margin: 0;
3   padding: 0;
4 }
5
6
7
8 .main{
9   width: 100%;
10  background: url(img2.jpg);
11  background-position: center;
12  background-size: cover;
13  height: 100vh;
14 }
```

Cascade Style Sheets File length: 106 lines: 13 Ln: 1 Col: 1 Pos: 1 Windows (CR LF) UTF-8 INS

JavaScript File

```
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
form.html feedback form.html style.css script.js
1 const name = document.getElementById('name')
2 const password = document.getElementById('password')
3 const form = document.getElementById('form')
4 const errorElement = document.getElementById('error')
5
6 form.addEventListener('submit', (e) => {
7   let messages=[]
8   if (name.value === '' || name.value == null) {
9     messages.push('name is required')
10  }
11  if (password.value.length <= 6) {
12    messages.push('password must be longer than 6 charecters')
13  }
14  if (password.value.lenth >= 20) {
15    messages.push('password must be less than 20 charecters')
16  }
17  if (password.value === 'password') {
18    messages.push('password cannot be password')
19  }
20  if (messages.lenth > 0) {
21    e.preventDefault()
22    errorElement.innerText = messages.join(' ')
23  }
24 })
```

JavaScript file length: 815 lines: 24 Ln: 1 Col: 1 Pos: 1 Windows (CR LF) UTF-8 INS

Output for registration webpage

Hotel
[Home](#)
[About](#)
[Service](#)
[Contact](#)

Today's Special
Biryani
Chicken Rice
Noodles
barotha
pizza

Today's offer
1.Buy 1 Large pizza ***** Get 100ml 7up free
1.Buy 1 bucket briyani ***** Get 1 lolipop free
1.Buy 10 paratha ***** Get 1 paratha free

Feedback form
Name Feedback

Name

Password

your feedback was submitted successfully