# Assignment – 1

## Chess board:

```html
<!DOCTYPE html>
<html>
  <head>
    <title>**Chess Board**</title>
    <meta charset="UTF-8">
    <style>
      * {
         margin: 0;
         padding: 0;
      }
      table {
         width: 500px;
         height: 500px;
         margin: auto;
      }
      table td {
         border: 1px solid;
      }
      .dark {
         background-color: black;
         width: 50px;
      }
      .white {
         background-color: white;
         width: 50px;
      }
    </style>
  </head>
  <body>
    <table>
      <tbody>
        <tr>
           <th></th>
           <th>a</th>
           <th>b</th>
           <th>c</th>
           <th>d</th>
           <th>e</th>
           <th>f</th>
           <th>g</th>
           <th>h</th>
        </tr>


        <tr>
           <th>1</th>
           <td class="light"></td>
           <td class="dark"></td>
           <td class="light"></td>
```

```html
          <td class="dark"></td>
          <td class="light"></td>
          <td class="dark"></td>
          <td class="light"></td>
          <td class="dark"></td>
      </tr>
      <tr>
          <th>2</th>
          <td class="dark"></td>
          <td class="light"></td>
          <td class="dark"></td>
          <td class="light"></td>
          <td class="dark"></td>
          <td class="light"></td>
          <td class="dark"></td>
          <td class="light"></td>
      </tr>
      <tr>
          <th>3</th>
          <td class="light"></td>
          <td class="dark"></td>
          <td class="light"></td>
          <td class="dark"></td>
          <td class="light"></td>
          <td class="dark"></td>
          <td class="light"></td>
          <td class="dark"></td>
      </tr>
      <tr>
          <th>4</th>
          <td class="dark"></td>
          <td class="light"></td>
          <td class="dark"></td>
          <td class="light"></td>
          <td class="dark"></td>
          <td class="light"></td>
          <td class="dark"></td>
          <td class="light"></td>
      </tr>
      <tr>
          <th>5</th>
          <td class="light"></td>
          <td class="dark"></td>
          <td class="light"></td>
          <td class="dark"></td>
          <td class="light"></td>
          <td class="dark"></td>
          <td class="light"></td>
          <td class="dark"></td>
```

```html
      </tr>
      <tr>
        <th>6</th>
        <td class="dark"></td>
        <td class="light"></td>
        <td class="dark"></td>
        <td class="light"></td>
        <td class="dark"></td>
        <td class="light"></td>
        <td class="dark"></td>
        <td class="light"></td>
      </tr>
      <tr>
        <th>7</th>
        <td class="light"></td>
        <td class="dark"></td>
        <td class="light"></td>
        <td class="dark"></td>
        <td class="light"></td>
        <td class="dark"></td>
        <td class="light"></td>
        <td class="dark"></td>
      </tr>
      <tr>
        <th>8</th>
        <td class="dark"></td>
        <td class="light"></td>
        <td class="dark"></td>
        <td class="light"></td>
        <td class="dark"></td>
        <td class="light"></td>
        <td class="dark"></td>
        <td class="light"></td>
      </tr>
    </tbody>
  </table>
  </body>
</html>
```

VIBGYOR :

```html
<!DOCTYPE html>
<html>
  <head>
    <title>**VIBGYOR**</title>
    <meta charset="UTF-8">
    <style>
      * {
        margin: 0;
        padding: 0;
        padding-top: 20px;
      }
      table{
```

```
          width: 500px;
          height: 500px;
          margin: auto;
        }
        .Violet {
          background-color: #9400D3;
        }
        .Indigo {
          background-color: #4B0082;
        }
        .Blue {
          background-color: #0000FF;
        }
        .Green {
          background-color: #00FF00;
        }
        .Yellow {
          background-color: #FFFF00;
        }
        .Orange {
          background-color: #FF7F00;
        }
        .Red {
          background-color: #FF0000;
        }
    </style>
 </head>
<body>
    <table>
      <tbody>
        <tr>
          <td class="Violet"></td>
          <td class="light"></td>
          <td class="light"></td>
          <td class="light"></td>
          <td class="light"></td>
          <td class="light"></td>
          <td class="light"></td>
        </tr>
        <tr>
          <td class="light"></td>
          <td class="Indigo"></td>
          <td class="light"></td>
          <td class="light"></td>
          <td class="light"></td>
          <td class="light"></td>
          <td class="light"></td>
        </tr>
        <tr>
          <td class="light"></td>
          <td class="light"></td>
```

```html
        <td class="Blue"></td>
        <td class="light"></td>
        <td class="light"></td>
        <td class="light"></td>
        <td class="light"></td>
      </tr>
      <tr>
        <td class="light"></td>
        <td class="light"></td>
        <td class="light"></td>
        <td class="Green"></td>
        <td class="light"></td>
        <td class="light"></td>
        <td class="light"></td>
      </tr>
      <tr>
        <td class="light"></td>
        <td class="light"></td>
        <td class="light"></td>
        <td class="light"></td>
        <td class="Yellow"></td>
        <td class="light"></td>
        <td class="light"></td>
      </tr>
      <tr>
        <td class="light"></td>
        <td class="light"></td>
        <td class="light"></td>
        <td class="light"></td>
        <td class="light"></td>
        <td class="Orange"></td>
        <td class="light"></td>
      </tr>
      <tr>
        <td class="light"></td>
        <td class="light"></td>
        <td class="light"></td>
        <td class="light"></td>
        <td class="light"></td>
        <td class="light"></td>
        <td class="Red"></td>
      </tr>
    </tbody>
  </table>
 </body>
</html>
```

TIC-TAC-TOE:

```html
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="style.css">
    <link rel="preconnect" href="https://fonts.gstatic.com">
    <link href="https://fonts.googleapis.com/css2?family=Itim&display=swap" rel="stylesheet">
    <script src="./index.js"></script>
    <title>Tic-Tac-Toe</title>
<style>
* {
    padding: 0;
    margin: 0;
    font-family: 'Itim';
}

.title {
    color: black;
    text-align: center;
    font-size: 40px;
    margin-top: 2%;
}

.display {
    color: black;
    font-size: 25px;
    text-align: center;
    margin-top: 1em;
    margin-bottom: 1em;
}

.hide {
    display: none;
}

.container {
    margin: 0 auto;
    display: grid;
    grid-template-columns: 33% 33% 33%;
    grid-template-rows: 33% 33% 33%;
    max-width: 300px;

}

.tile {
    border: 1px solid black;
    min-width: 100px;
```

```css
    min-height: 100px;
    display: flex;
    justify-content: center;
    align-items: center;
    font-size: 50px;
    cursor: pointer;
}

.playerX {
    color: #09C372;
}

.playerO {
    color: #498AFB;
}

.controls {
    display: flex;
    flex-direction: row;
    justify-content: center;
    align-items: center;
    margin-top: 1em;
}

.controls button {
    color: white;
    padding: 8px;
    border-radius: 8px;
    border: none;
    font-size: 20px;
    margin-left: 1em;
    cursor: pointer;
}

.restart {
    background-color: #498AFB;
}

#reset {
    background-color: #FF3860;
}
</style>
</head>
<body>
    <main class="background">
        <section class="title">
            <h1>Tic Tac Toe</h1>
        </section>
        <section class="display">
            Player <span class="display-player playerX">X</span>'s turn
        </section>
```

```html
    <section class="container">
        <div class="tile"></div>
        <div class="tile"></div>
        <div class="tile"></div>
        <div class="tile"></div>
        <div class="tile"></div>
        <div class="tile"></div>
        <div class="tile"></div>
        <div class="tile"></div>
        <div class="tile"></div>
    </section>
    <section class="display announcer hide"></section>
    <section class="controls">
        <button id="reset">Reset</button>
    </section>
  </main>
</body>
</html>
```

```javascript
window.addEventListener('DOMContentLoaded', () => {
    const tiles = Array.from(document.querySelectorAll('.tile'));
    const playerDisplay = document.querySelector('.display-player');
    const resetButton = document.querySelector('#reset');
    const announcer = document.querySelector('.announcer');

    let board = ['', '', '', '', '', '', '', '', ''];
    let currentPlayer = 'X';
    let isGameActive = true;

    const PLAYERX_WON = 'PLAYERX_WON';
    const PLAYERO_WON = 'PLAYERO_WON';
    const TIE = 'TIE';
    const winningConditions = [
        [0, 1, 2],
        [3, 4, 5],
        [6, 7, 8],
        [0, 3, 6],
        [1, 4, 7],
        [2, 5, 8],
        [0, 4, 8],
        [2, 4, 6]
    ];
    function handleResultValidation() {
        let roundWon = false;
        for (let i = 0; i <= 7; i++) {
            const winCondition = winningConditions[i];
            const a = board[winCondition[0]];
            const b = board[winCondition[1]];
            const c = board[winCondition[2]];
            if (a === '' || b === '' || c === '') {
```

```javascript
              continue;
          }
        if (a === b && b === c) {
            roundWon = true;
            break;
        }
      }
    if (roundWon) {
        announce(currentPlayer === 'X' ? PLAYERX_WON : PLAYERO_WON);
        isGameActive = false;
        return;
    }
    if (!board.includes(''))
        announce(TIE);
}
const announce = (type) => {
    switch(type){
        case PLAYERO_WON:
            announcer.innerHTML = 'Player <span class="playerO">O</span> Won';
            break;
        case PLAYERX_WON:
            announcer.innerHTML = 'Player <span class="playerX">X</span> Won';
            break;
        case TIE:
            announcer.innerText = 'Tie';
    }
    announcer.classList.remove('hide');
};

const isValidAction = (tile) => {
    if (tile.innerText === 'X' || tile.innerText === 'O'){
        return false;
    }

    return true;
};

const updateBoard =  (index) => {
    board[index] = currentPlayer;
}

const changePlayer = () => {
    playerDisplay.classList.remove(`player${currentPlayer}`);
    currentPlayer = currentPlayer === 'X' ? 'O' : 'X';
    playerDisplay.innerText = currentPlayer;
    playerDisplay.classList.add(`player${currentPlayer}`);
}

const userAction = (tile, index) => {
    if(isValidAction(tile) && isGameActive) {
        tile.innerText = currentPlayer;
```

```javascript
        tile.classList.add(`player${currentPlayer}`);
        updateBoard(index);
        handleResultValidation();
        changePlayer();
      }
   }

   const resetBoard = () => {
      board = ['', '', '', '', '', '', '', '', ''];
      isGameActive = true;
      announcer.classList.add('hide');

      if (currentPlayer === 'O') {
         changePlayer();
      }

      tiles.forEach(tile => {
         tile.innerText = '';
         tile.classList.remove('playerX');
         tile.classList.remove('playerO');
      });
   }

   tiles.forEach( (tile, index) => {
      tile.addEventListener('click', () => userAction(tile, index));
   });

   resetButton.addEventListener('click', resetBoard);
});
```
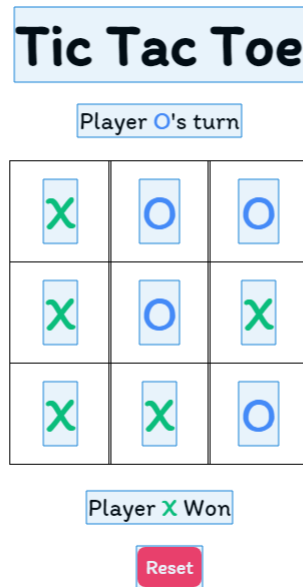


TIME TABLE:

```html
<html>
<head>
  <title>time table</title>
</head>
<body bgcolor=#FFE5B4>
      <H1><FONT COLOR=#A020F0><CENTER>COLLEGE TIME TABLE</FONT></H1>
            <table border="5" cellspacing="20" align="center">
                  <tr>
                  <td align="center">
                  <td>09:00-09:50</td>
                  <td>09:50-10:40</td>
                  <td>10:40-11:00</td>
                  <td>11:00-11:50</td>
                  <td>11:50-12:40</td>
                  <td>12:40-01:20</td>
                  <td>01:20-02:10</td>
                  <td>02:10-03:00</td>
                  <td>03:00-03:50</td>
                  </tr>
```

```html
                <tr>
                <td align="center">MONDAY</td>
                <td align="center"><font color=#2B65EC>HCI<br></font></td>
                <td align="center"><font color=#FD1C03>CC<br></font></td>
                <td rowspan="6"align="center">B<br>R<br>E<br>A<br>K</td>
                <td align="center"><font color=#FF1493>SCM<br></font></td>
                <td align="center"><font color=#006400>CNS<br></font></td>
                <td rowspan="6"align="center">L<br>U<br>N<br>C<br>H</td>
                <td colspan="3" align="center"><font color=#000000>NALAIYA
THIRAN<br></font></td>

                </tr>
                <tr>
                <td align="center">TUESDAY</td>
                <td align="center"><font color=#36013F>POM<br></font></td>
                <td align="center"><font color=#2B65EC>HCI<br></font></td>
                <td align="center"><font color=#FF1493>SCM<br></font></td>
                <td align="center"><font color=#2B65EC>HCI<br></font></td>
                <td colspan="3" align="center"><font color="maroon">CC/SEC
LAB<br></font></td>
                </tr>
                <tr>
                <td align="center">WEDNESDAY
                <td align="center"><font color=#006400>CNS<br></font></td>
                <td align="center"><font color=#FD1C03>CC<br></font></td>
                <td align="center"><font color=#006400>CNS<br></font></td>
                <td align="center"><font color=#FD1C03>CC<br></font></td>
                <td align="center"><font color=#36013F>POM<br></font></td>
                <td align="center"><font color=#2B65EC>HCI<br></font></td>
                <td align="center"><font color=#36013F>POM<br></font></td>
                </tr>
                <tr>
                <td align="center">THURSDAY
                <td align="center"><font color=#2B65EC>HCI<br></font></td>
                <td align="center"><font color=#FF1493>SCM<br></font></td>
                <td align="center"><font color=#FD1C03>CC<br></font></td>
                <td align="center"><font color="blue">LIBRARY<br>
                <td colspan="3" align="center"><font color=#000000>NALAIYA
THIRAN<br></font></td>
                </tr>
                <tr>
                <td align="center">FRIDAY
                <td align="center"><font color=#FD1C03>CC<br></font></td>
                <td align="center"><font color="maroon">CC/SEC LAB<br>
                <td colspan="2" align="center"><font color="maroon">CC/SEC
LAB<br></font></td><td align="center"><font color=#36013F>POM<br></font></td>
                <td align="center"><font color=#FF1493>SCM<br></font></td>
                <td align="center"><font color=#006400>CNS<br></font></td>
                </tr>
</body>
</html>
```

WEB PAGE:

```html
<!DOCTYPE html>
<html>
<head>
        <meta charset="UTF-8" />
        <meta name="viewport" content="width=device-width, initial-scale=1.0" />
        <meta http-equiv="X-UA-Compatible" content="ie=edge" />
        <title>REGISTER</title>

        <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css" integrity="sha384-
ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T"
        crossorigin="anonymous" />
        <link rel="stylesheet" href="https://use.fontawesome.com/releases/v5.7.2/css/all.css"
integrity="sha384-fnmOCqbTlWIlj8LyTjo7mOUStjsKC4pOpQbqyi7RrhN7udi9RwhKkMHpvLbHG9Sr"
        crossorigin="anonymous">
        <script defer src="register.js"></script>
        <link rel="stylesheet" href="registeration.css"/>
</head>
<body>
        <header>
                <div class="container-fluid p-0">
                        <nav class="navbar navbar-expand-lg">
                                <a class="navbar-brand" href="#">
                                        <i class="fas fa-address-card"></i>    
REGISTRATION PAGE WITH HTML, CSS, AND JS</a>
                                        <button class="navbar-toggler" type="button" data-toggle="collapse"
data-target="#navbarNav" aria-controls="navbarNav" aria-expanded="false"
                                        aria-label="Toggle navigation">
                                        <i class="fas fa-indent text-light"></i>
                                </button>
                        </nav>
                </div>
                <div class="container text-center">
                        <div class="row">
                                <div class="col-md-7 col-sm-12  text-white">
                                        <form id="form" action="/">

                                                <label>User Name</label>
                                                <input type="text" name="username" id="username">
                                                 <div class="error"></div>
                                                <label>Email</label>
                                                <input type="text" name="email" id="email">
                                                 <div class="error"></div>
                                                <label>Password</label>
                                                <input type="text" name="password" id="password">
                                                 <div class="error"></div>
                                                <button type="submit" onclick="alert('You have registered
successfully')" >register</button>
                                        </form>
```

```
                                </div>
                                <div class="col-md-5 col-sm-12  h-25">
                                        <img src="register.png" alt="...." />
                                </div>
                        </div>
                </div>
        </header>
</body>
</html>


const form = document.getElementById('form');
const username = document.getElementById('username');
const email = document.getElementById('email');
const password = document.getElementById('password');

form.addEventListener('submit', e => {
    e.preventDefault();

    validateInputs();
});

const setError = (element, message) => {
    const inputControl = element.parentElement;
    const errorDisplay = inputControl.querySelector('.error');

    errorDisplay.innerText = message;
    inputControl.classList.add('error');
    inputControl.classList.remove('success')
}

const setSuccess = element => {
    const inputControl = element.parentElement;
    const errorDisplay = inputControl.querySelector('.error');

    errorDisplay.innerText = '';
    inputControl.classList.add('success');
    inputControl.classList.remove('error');
};

const isValidEmail = email => {
    const re = /^(([^<>()[\]\\.,;:\s@"]+(\.[^<>()[\]\\.,;:\s@"]+)*)|(".+"))@((\[[0-9]{1,3}\.[0-9]{1,3}\.[0-
9]{1,3}\.[0-9]{1,3}\])|(([a-zA-Z\-0-9]+\.)+[a-zA-Z]{2,}))$/;
    return re.test(String(email).toLowerCase());
}

const validateInputs = () => {
    const usernameValue = username.value.trim();
    const emailValue = email.value.trim();
    const passwordValue = password.value.trim();
```

```
  if(usernameValue === '') {
     setError(username, 'Username is required');
  } else {
     setSuccess(username);
  }

  if(emailValue === '') {
     setError(email, 'Email is required');
  } else if (!isValidEmail(emailValue)) {
     setError(email, 'Provide a valid email address');
  } else {
     setSuccess(email);
  }

  if(passwordValue === '') {
     setError(password, 'Password is required');
  } else if (passwordValue.length < 6 ) {
     setError(password, 'Password must be at least 6 character.')
  } else {
     setSuccess(password);
  }

};


@import url("https://fonts.googleapis.com/css?family=Acme|Lobster|Patua+One|Rubik|Sniglet");
@import url('https://fonts.googleapis.com/css2?family=Tiro+Bangla:ital@1&display=swap');
* {
 box-sizing: border-box;
}

header {
 overflow-x: hidden;
}

:root {
 --Sniglet-font: "Sniglet", cursive;
 --Rubik: "Rubik", cursive;
 --bggradient: linear-gradient(to bottom, #FF6DA4, #1DC28B);

}

header a {
 font-family: var(--Sniglet-font);
 font-size: 6rem;
 color: whitesmoke;
}

header .navbar-brand {
 padding-left: 8rem;
}
```

```css
header .navbar-brand:hover{
  color: black;
}

header .row .col-md-7 {
  padding: 25vmin 1vmin;
  padding-bottom: 128px;
}

header .row .col-md-5 {
  padding: 4.2vmin 1vmin;
}

header .row .col-md-5 img {
  width: 90%;
}

header {
  background: #C21D54;
  /* fallback for old browsers */
  background: var(--bggradient);
}

header .container .col-md-7 {
  font-family: "Rubik", sans-serif;
}

form{
    width: 30rem;
    height: 18rem;
    display: flex;
    flex-direction: column;
    background: rgba(255,255,255,0.06);
    box-shadow: 0 8px 32px 0 rgba(31,38,135,0.37);
    border-radius: 30px;
    border-left: 1px solid rgba(255,255,255,.3);
    border-top: 1px solid rgba(255,255,255,.3);
}

form:before{
    content: '';
    position: absolute;
    top: 2%;
    right: 50%;
    width: 50px;
    height: 50px;
    background: #728FCE;
    border-radius: 20%;
    z-index: -1;
    opacity: .8;
```

```css
}

label{
    font-size: 20px;
    color: black;
    text-shadow: 2px 2px 4px rgba(0,0,0,.2);
}

input{
    width: 90%;
    margin: 2% auto;
    margin-bottom: 4%;
    border: none;
    outline: none;
    background: transparent;
    color: #000000;
    border-bottom: 1px solid rgb(0,0,0);
}

button{
    width: 50%;
    margin: 3% auto;
    color: black;
    font-size: 15px;
    opacity: .9;
    background: rgba(255,255,255,0.06);
    padding: 10px 30px;
    outline: none;
    border-radius: 20px;
    text-shadow: 2px 2px 4px rgb(0,0,0);
    box-shadow: rgba(31,38,135,.37);
}
```