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CSE C

Exercise 3: JavaScript event handling mechanisms, DOM

Generate a registration form for a hospital to register new patient details as below:

Code:

Register.html

```html
<!DOCTYPE html>

<html lang="en" dir="ltr">

 <head>

  <meta charset="utf-8">

  <title>Registration Form</title>

  <link rel="stylesheet" href="style.css">

 </head>


 <body onload="startTime()">

  <div id="txt"></div>

  <h1>Register Here!</h1>

  <form  action="/action_page.php" style = "text-align: center;" method="post" id="regform">

    <label for="name">Name</label><br>

    <input type="text" id="name" name="name" placeholder="Name" minlength="1" required ><br>
```

```html
<label for="Address">Address</label><br>

<textarea name="Address" id="Address" placeholder="Address" required rows="8" cols="80"></textarea><br>

<label for="Age">Age</label><br>

<input type="number" name="Age" id="Age" placeholder="Age" min="1" onblur="ageBlur(this)" onfocus="onFocus(this)"><br>

<label id="check-age" style="display: none">Enter valid age!</label><br>

<label for="DOB">Date of Birth</label><br>

<input type="date" name="DOB" id="DOB" placeholder="Date of birth" required value=""><br>

<label for="gender">Gender</label><br>

<input id="male" type="radio" name="gender" value="Male"><label for="male">Male</label>

<input id="female" type="radio" value="Female" name="gender"><label for="female">Female</label>

<input type="radio" id="other" name="gender" value="Other"><label for="other">Other</label><br>

<label for="marriage">Marital Status</label><br>

<select name="marriage" id="marriage" required>

  <option value="Single">Single</option>

  <option value="Married">Married</option>

</select><br>

<label for="phone">Phone Number</label><br>

<input type="text" name="phone" id="phone" placeholder="Phone Number" minlength="10" onblur="numBlur(this)" onfocus="onFocus(this)" required><br>

<label id="check-phone" style="display: none">Enter valid number!</label><br>
```

```html
<table><br>

  <label for="addict">Addiction</label><br>

  <textarea name="addict" id="addict" placeholder="Addictions"></textarea><br>

  <ul id="addict">

    <li class="dropzone" id="0" draggable="true">Alcohol </li>

    <li class="dropzone" id="1" draggable="true">Drugs </li>

    <li class="dropzone" id="2" draggable="true">Electronics </li>

    <li class="dropzone" id="3" draggable="true">Other </li>

  </ul><br>

  <tr>

   <input type="submit" value="Submit" id="Sumbit" onclick="submitForm()"/>

   <input type="reset" value="Reset" onclick="myReset()"/><br>

  </tr>

 </table>


 </form>

 <script src="script.js"></script>

 </body>

</html>
```

<u>Style.css</u>

```css
body{

  background-image: url("img.jpg");

  background-size: 1990px 1000px;

}


h1{

  color: indigo;

  text-align: center;

}

input[type="text"],

input[type="number"],

input[type="date"],

select,

textarea {

  width: 50%;

  padding: 12px;

  border: 1px solid #cccc;

  border-radius: 5px;

  margin: 10px;

  background-color: black;

}
```

```css
input[type=submit] {

    background-color: green;

    width:10%;

    color: white;

    padding: 10px;

    border-radius: 10px;

}


input[type=reset] {

    background-color: red;

    width:10%;

    color: white;

    padding: 10px;

    border-radius: 10px;

}


label{

  font-family: verdana;

  color: purple;

}


ul#addict li {

  display: inline;
```

```css
}

div{

  background-color: white;

  width: 3.5%;

  border-radius: 10px;

  padding-left: 15px

}
```

Script.js

```javascript
document.addEventListener("dragstart", function (event) {

  event.dataTransfer.setData("Text", event.target.innerHTML);

});

function startTime() {

  var today = new Date();

  var h = today.getHours();

  var m = today.getMinutes();

  var s = today.getSeconds();

  m = checkTime(m);

  s = checkTime(s);

  document.getElementById('txt').innerHTML =

  h + ":" + m + ":" + s;

  var t = setTimeout(startTime, 500);

}
```

```javascript
function checkTime(i) {

  if (i < 10) {i = "0" + i};  // add zero in front of numbers < 10

  return i;

}


const checkAge = document.getElementById("check-age");

const ageBlur = (num) => {

  const n = num.value;

  if(n<1){

    checkAge.style.display = "inline";

  }

}

const checkPhone = document.getElementById("check-phone");

  const numBlur = (pho) => {

    const p = pho.value;

    if(!p.match(/^[789]\d{9}$/g)){

      checkPhone.style.display = "inline";

    }

  }

  const onFocus = (el) => {

    switch (el.name) {

      case "Age": {

        checkAge.style.display = "none";
```

```javascript
        break;

      }

    case "phone": {

      checkPhone.style.display = "none";

       break;

      }

    default: {

       break;

      }

    }

  };


function submitForm(){

   var name = document.getElementById("name").value;

localStorage.setItem("name", name);


var addr = document.getElementById("Address").value;

localStorage.setItem("address", addr);


var age = document.getElementById("Age").value;

localStorage.setItem("age", age);


var dob = document.getElementById("DOB").value;
```

```javascript
localStorage.setItem("dob", dob);

var ele = document.getElementsByName('gender');

    for(i = 0; i < ele.length; i++) {

       if(ele[i].checked)

           localStorage.setItem("gender", ele[i].value);

    }

var marriage = document.getElementById("marriage").value;

localStorage.setItem("marriage", marriage);

var phone = document.getElementById("phone").value;

localStorage.setItem("phone", phone);

var addict = document.getElementById("addict").value;

localStorage.setItem("addict", addict);

window.open("details.html", "_blank");

}

function myReset(){

   document.getElementById("regform").reset();

}
```

```html
<!DOCTYPE html>

<html lang="en" dir="ltr">

 <head>

  <meta charset="utf-8">

  <title>Details</title>

  <link rel="stylesheet" href="style.css">

  <style media="screen">

   td{

    color: purple;

   }

   th{

    color: red;

   }

  </style>

 </head>

 <body>

  <h1 style="text-align: center;">Patient Details</h1>

  <table align="center">

   <tr>

    <th>Name</th><td id="name"></td>

   </tr>
```
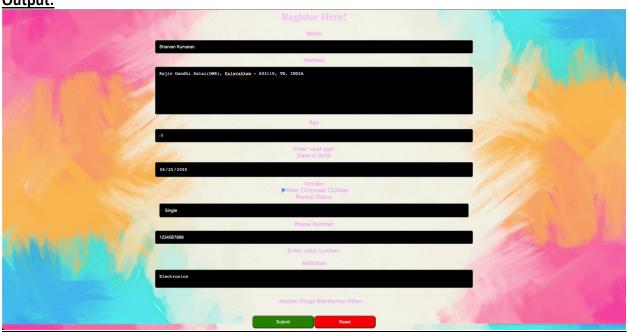
```html
<tr>

 <th>Address</th><td id="address"></td>

</tr>

<tr>

 <th>Age</th><td id="age"></td>

</tr>

<tr>

 <th>DOB</th><td id="dob"></td>

</tr>

<tr>

 <th>Gender</th><td id="gender"></td>

</tr>

<tr>

 <th>Marital Status</th><td id="marriage"></td>

</tr>

<tr>

 <th>Contact</th><td id="phone"></td>

</tr>

<tr>

 <th>Addiction</th><td id="addict"></td>

</tr>
</table>
<script type="text/javascript">
```

```
      document.getElementById("name").innerHTML = localStorage.getItem("name");

document.getElementById("address").innerHTML = localStorage.getItem("address");

document.getElementById("age").innerHTML = localStorage.getItem("age");

document.getElementById("dob").innerHTML = localStorage.getItem("dob");

document.getElementById("gender").innerHTML = localStorage.getItem("gender");

document.getElementById("marriage").innerHTML = localStorage.getItem("marriage");

document.getElementById("phone").innerHTML = localStorage.getItem("phone");

document.getElementById("addict").innerHTML = localStorage.getItem("addict");


  </script>

 </body>

</html>
```

Output:

Register Here!

Name

Sharvan Kumaran

Address

Rajiv Gandhi Salai(OMR), Kalavakkam - 603110, TN, INDIA

Age

-1

Enter valid age!

Date of Birth

06/25/2000

Gender
◉Male ○Female ○Other

Marital Status

Single

Phone Number

1234567899

Enter valid number!

Addiction

Electronics

Alcohol Drugs Electronics Other

Submit   Reset

Patient Details

Name	Sharvan Kumaran
Address	Rajiv Gandhi Salai(OMR), Kalavakkam - 603110, TN, INDIA
Age	25
DOB	2000-06-25
Gender	Male
Marital Status	Single
Contact	1234567899
Addiction	Electronics

Develop Memory Game;

Code:

Index.html

```html
<!DOCTYPE html>

<html>

  <head>

    <title>JavaScript</title>



    <link rel="stylesheet" href="style.css">

  </head>

  <body>

    <div class = outer-grid>

      <div class = "scoreboard">

        <div class = "center">

          <p id = "level"> Level 1 </p>

          <p id = "timer"> Time left : 60 </p>

          <p id = "score"> Score : 0 </p>

        </div>

        <div>

          <div>
```

```html
<p class = "push_button red" id = "btn" onclick = "start_game()">
Start level </a>

            </div>

        </div>

    </div>

    <div class = "pad">

        <div class = "grid-container">

            <div class="flip-card">

                <div class="flip-card-inner" id = "b1">

                    <div class = "flip-card-front" id = "b1f"></div>

                    <div class = "flip-card-back"></div>

                </div>

            </div>

            <div class="flip-card">

                <div class="flip-card-inner" id = "b2">

                    <div class = "flip-card-front" id = "b2f"></div>

                    <div class = "flip-card-back"></div>

                </div>

            </div>

            <div class="flip-card">

                <div class="flip-card-inner" id = "b3">
```

```html
        <div class = "flip-card-front" id = "b3f"></div>

        <div class = "flip-card-back"></div>

    </div>

</div>

<div class="flip-card">

    <div class="flip-card-inner" id = "b4">

        <div class = "flip-card-front" id = "b4f"></div>

        <div class = "flip-card-back"></div>

    </div>

</div>

<div class="flip-card">

    <div class="flip-card-inner" id = "b5">

        <div class = "flip-card-front" id = "b5f"></div>

        <div class = "flip-card-back"></div>

    </div>

</div>

<div class="flip-card">

    <div class="flip-card-inner" id = "b6">

        <div class = "flip-card-front" id = "b6f"></div>

        <div class = "flip-card-back"></div>

    </div>
```

```html
</div>

<div class="flip-card">

    <div class="flip-card-inner" id = "b7">

        <div class = "flip-card-front" id = "b7f"></div>

        <div class = "flip-card-back"></div>

    </div>

</div>

<div class="flip-card">

    <div class="flip-card-inner" id = "b8">

        <div class = "flip-card-front" id = "b8f"></div>

        <div class = "flip-card-back"></div>

    </div>

</div>

<div class="flip-card">

    <div class="flip-card-inner" id = "b9">

        <div class = "flip-card-front" id = "b9f"></div>

        <div class = "flip-card-back"></div>

    </div>

</div>

<div class="flip-card">

    <div class="flip-card-inner" id = "b10">
```

```html
      <div class = "flip-card-front" id = "b10f"></div>

      <div class = "flip-card-back"></div>

    </div>

  </div>

  <div class="flip-card">

    <div class="flip-card-inner" id = "b11">

      <div class = "flip-card-front" id = "b11f"></div>

      <div class = "flip-card-back"></div>

    </div>

  </div>

  <div class="flip-card">

    <div class="flip-card-inner" id = "b12">

      <div class = "flip-card-front" id = "b12f"></div>

      <div class = "flip-card-back"></div>

    </div>

  </div>

  <div class="flip-card">

    <div class="flip-card-inner" id = "b13">

      <div class = "flip-card-front" id = "b13f"></div>

      <div class = "flip-card-back"></div>

    </div>
```

```html
        </div>

        <div class="flip-card">

            <div class="flip-card-inner" id = "b14">

                <div class = "flip-card-front" id = "b14f"></div>

                <div class = "flip-card-back"></div>

            </div>

        </div>

        <div class="flip-card">

            <div class="flip-card-inner" id = "b15">

                <div class = "flip-card-front" id = "b15f"></div>

                <div class = "flip-card-back"></div>

            </div>

        </div>

        <div class="flip-card">

            <div class="flip-card-inner" id = "b16">

                <div class = "flip-card-front" id = "b16f"></div>

                <div class = "flip-card-back"></div>

            </div>

        </div>

    </div>

</div>
```

```html
        </div>

        <div id = "myModal" class="modal">

            <div id = "mc" class = "modal-content">

                <span class="close">&times;</span>

                <p id = "msg"></p>

            </div>

        </div>

        <script src="script.js"></script>

    </body>

</html>
```

Style.css

```css
html {

    background: url(bamboo.png) no-repeat center center fixed;

    background-size: cover;

    font-family: 'Verdana';

    font-weight: bold;

}


.center {
```

```css
    font-weight: bold;

    font-size: xx-large;

    position: absolute;

    width: 100%;

    top: 50%;

    left: 50%;

    -ms-transform: translate(-50%, -50%);

    transform: translate(-50%, -50%);

}


.outer-grid {

    display: grid;

    grid-template-columns: 7fr 20fr 7fr;

    border: 10%;

}


.outer-grid > div {

    text-align: center;

    justify-content: center;

    position: relative;

    top: 50%;
```

```css
    left: 50%;

    -ms-transform: translate(-50%, -50%);

    transform: translate(-50%, -50%);

}


.grid-container {

    display: grid;

    grid-template-columns: repeat(4, 1fr);

    grid-gap: 5px;

    padding: 5px;

}


.grid-container > div {

    position: relative;

    width: 100%;

    padding-bottom: 100%;

}


.pad {

    width: 70%;

    color: black;
```

```css
    background-color : blue;

    border: 1px solid;

    padding: 10px;

    border-radius: 20px;


}


.scoreboard {

    width: 80%;

    height: 50%;

    color: yellow;

    background-color : navy;

    border: 1px solid;

    padding: 10px;

    border-radius: 20px;


}


.flip-card {

    background-color: transparent;

    width: 100%;
```

```css
    height: 100%;

    perspective: 100%;

  }


.flip-card-inner {

    position: relative;

    width: 100%;

    height: 100%;

    text-align: center;

    transition: transform 0.6s;

    transform-style: preserve-3d;

}


.flip-card-front, .flip-card-back {

    display: flex;

    justify-content: center;

    align-items: center;

    position: absolute;

    width: 100%;

    height: 100%;

    -webkit-backface-visibility: hidden;
```

```css
    backface-visibility: hidden;

    font-size: x-large;

    border-radius: 16px;

}


.flip-card-front {

    background-color: orange;

    color: white;



}


.flip-card-back {

    background-color: orange;

    color: white;



    transform: rotateY(180deg);

}


.push_button {

        width:75%;

        height:10%;
```

```css
        text-align:center;

        color:#FFF;

        font-family:'Verdana';

        display: block;

        margin: 30px;

}


.push_button:before {

        background:#f0f0f0;

        background-image:-webkit-gradient(linear, 0% 0%, 0% 100%,
from(#D0D0D0), to(#f0f0f0));


        border-radius:5px;



        z-index: -1;

}


.push_button:active {

        box-shadow:0 1px 0 rgba(255, 255, 255, .5) inset, 0 -1px 0 rgba(255, 255,
255, .1) inset;

        top:5px;
```

```css
}


.push_button:active:before{

        top: -11px;

        bottom: -5px;

        content: "";

}


.red {

        text-shadow:-1px -1px 0 #A84155;

        background: #D25068;

        border:1px solid #D25068;


        background-image:linear-gradient(to bottom, #F66C7B, #D25068);

        border-radius:5px;

}


.red:hover {

        background: #F66C7B;

        background-image:linear-gradient(top, #D25068, #F66C7B);

}
```

```css
body {font-family: 'Verdana';}



.modal {

    display: none;

    position: fixed;

    z-index: 1;

    padding-top: 100px;

    left: 0;

    top: 0;

    width: 100%;

    height: 100%;

    overflow: auto;

    background-color: rgb(0,0,0);

    background-color: rgba(0,0,0,0.4);

}


.modal-content {

    text-align: center;

    background-color: Khaki;
```

```css
    margin: auto;

    padding: 20px;

    border: 1px solid #888;

    width: 50%;

    border-radius: 20px

}


.close {

    color: black;

    float: right;

    font-size: 28px;

    font-weight: bold;

}


.close:hover, .close:focus {

    color: #000;

    text-decoration: none;

    cursor: pointer;

}
```

```
const timer = document.getElementById("timer");

const modal = document.getElementById("myModal");

const span = document.getElementsByClassName("close")[0];


let sec = 0;

let stoptime = true;

let count = 0, id1 = -1, id2 = -1, level = 1;

let array = [];

let set1 = new Set();


function startTimer() {

    if (stoptime == true) {

        stoptime = false;

        timerCycle();

    }

}


function stopTimer() {

    if (count == 16){

        document.getElementById("mc").style.backgroundColor = "Purple";
```

```javascript
        if(level < 3) {

            document.getElementById("msg").innerHTML = "Advance to the next
level";

            document.getElementById("btn").style.display = "block";

            level += 1;

        } else {

            document.getElementById("msg").innerHTML = "Game Over";

        }

        document.getElementById("level").innerHTML = "Level " + level;

    } else {

        document.getElementById("mc").style.backgroundColor = "Red";

        document.getElementById("msg").innerHTML = "Failed";

        document.getElementById("btn").style.display = "block";

    }

    document.getElementById("timer").innerHTML = "Time remaining : " + (60 -
(level - 1) * 10);

    document.getElementById("score").innerHTML = "Score : 0";

    box();

    if (stoptime == false) {

        stoptime = true;

    }

}
```

```javascript
function timerCycle() {

  if (stoptime == false) {

    sec = parseInt(sec);

    sec = sec - 1;


    if (sec == 0) {

      stopTimer();

    } else {

      if (sec < 10 || sec == 0) {

        sec = '0' + sec;

      }

      timer.innerHTML = "Time left : " + sec;

      setTimeout("timerCycle()", 1000);

    }

  }

}


function resetTimer() {

  timer.innerHTML = "00";

  stoptime = true;
```

```javascript
        sec = 60;

    }


function shuffle(array) {

    let currentIndex = array.length, temporaryValue, randomIndex;

    while (0 !== currentIndex) {

        randomIndex = Math.floor(Math.random() * currentIndex);

        currentIndex -= 1;

        temporaryValue = array[currentIndex];

        array[currentIndex] = array[randomIndex];

        array[randomIndex] = temporaryValue;

    }

    return array;

}


function display(array) {

    for(i = 0; i < 16; i++){

        let s = 'b' + (i + 1);

        document.getElementById(s + 'f').style.transform = "rotateY(0deg)";

        document.getElementById(s + 'f').innerHTML = array[i];

        document.getElementById(s).style.transform = "rotateY(180deg)";
```

```javascript
        document.getElementById(s).setAttribute( "onClick", "javascript: flip(this);" );

        document.getElementById(s).style.cursor = "pointer";

    }

}


function start_game() {

    count = 0, id1 = -1, id2 = -1;

    array = [];

    sec = 60 - (level - 1) * 10;

    for(i = 1; i <= 8; i++){

        array.push(i);

        array.push(i);

    }

    array = shuffle(array);

    display(array);

    document.getElementById("score").innerHTML = "Score : 0";

    document.getElementById("btn").style.display = "none";

    set1 = new Set();

    startTimer();

}
```

```javascript
function sleep(ms) {

    return new Promise(resolve => setTimeout(resolve, ms));

}


async function ch(e){

    if(id1 == -1){

        id1 = e;

        e.onclick = null;

        e.style.cursor = "default";

    } else {

        id2 = e;

        e.onclick = null;

        e.style.cursor = "default";

        if(document.getElementById(id1.id + 'f').innerHTML ==
document.getElementById(id2.id + 'f').innerHTML){

            let x = parseInt(document.getElementById(id1.id + 'f').innerHTML);

            document.getElementById(id1.id + 'f').style.transform = "rotateY(180deg)";

            document.getElementById(id2.id + 'f').style.transform = "rotateY(180deg)";

            set1.add(x);

            count += 2;

            document.getElementById("score").innerHTML = "Score : " + count / 2;
```

```javascript
    } else {

        for (i = 0; i < 16; i++){

            if(set1.has(array[i]) == true) continue;

            let s = 'b' + (i + 1);

            document.getElementById(s).setAttribute( "onClick", "null" );

        }

        await sleep(600);

        for (i = 0; i < 16; i++){

            if(set1.has(array[i]) == true) continue;

            let s = 'b' + (i + 1);

            document.getElementById(s).setAttribute( "onClick", "javascript:
flip(this);" );

        }

        id1.setAttribute( "onClick", "javascript: flip(this);" );

        id2.setAttribute( "onClick", "javascript: flip(this);" );

        id1.style.cursor = "pointer";

        id2.style.cursor = "pointer";

        id1.style.transform = "rotateY(180deg)";

        id2.style.transform = "rotateY(180deg)";


    }
```

```javascript
        id1 = -1, id2 = -1;

    }

    if(count == 16) stopTimer();

}


function show(e){

    e.style.transform = "rotateY(0deg)";

}


function flip(e){

    if(e.id == null) return;

    show(e);

    ch(e);

}


function box(){

  modal.style.display = "block";

}


span.onclick = function() {

  modal.style.display = "none";
```

```
}


window.onclick = function(event) {

    if (event.target == modal) {

        modal.style.display = "none";

    }

}
```

Output:

Level 1

Time left : 49

Score : 1

6

Start level

Level 2

Time remaining : 50

Score : 0

Advance to the next level

Failed ✕

Start level

Level 2

**Time remaining :
50**

Score : 0