**HARSHIT DEVADIGA**

**E015**

**ASSIGNMENT 2**

1. Create percentage calculator for semester IV. User will enter no of courses and click submit button. Those many number fields must be generated dynamically. User will enter marks of each course and the calculate percentage. (Hint: Use DOM methods createElement(), setAttributes(), createTextNode(), appendChild())
2. Create an application to print no of days left for next Christmas(Hint: use date object in js)
3. Create an application to print mouse coordinates.

**QUESTION 1:**

**Code:**

Index.html

<!DOCTYPE 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" />

    <title>Document</title>

    <script type="text/javascript" src="script.js"></script>

  </head>

  <body>

    <h3>Percentage Calculator</h3>

    <p>Number of courses:</p>

    <input type="number" id="course\_nums" />

    <button onclick="genfields()">Submit</button>

    <br />

    <br />

    <form id="course\_form">

      <div id="course\_values"></div>

    </form>

    <br />

    <button id="calc-button" onclick="totalpercent()" disabled>

      Calculate Percentage

    </button>

    <p id="result"></p>

  </body>

</html>

script.js

function genfields() {

  let course\_nums = document.getElementById("course\_nums").value;

  let coursevalues = document.getElementById("course\_values");

  coursevalues.innerHTML = "";

  document.getElementById("calc-button").disabled = false;

  for (let i = 1; i <= course\_nums; i++) {

    let courseInput = document.createElement("input");

    courseInput.setAttribute("type", "number");

    courseInput.setAttribute("name", "course-" + i);

    coursevalues.appendChild(

      document.createTextNode("Course " + i + " marks: ")

    );

    coursevalues.appendChild(courseInput);

    coursevalues.appendChild(document.createElement("br"));

  }

}

function totalpercent() {

  let courseForm = document.getElementById("course\_form");

  let course\_nums = document.getElementById("course\_nums").value;

  let totalMarks = 0;

  for (let i = 1; i <= course\_nums; i++) {

    let courseMarks = parseInt(courseForm["course-" + i].value);

    totalMarks += courseMarks;

  }

  let percentage = totalMarks / course\_nums;

  let result = document.getElementById("result");

  result.innerHTML = "";

  let resultText = document.createTextNode(

    "Percentage: " + percentage.toFixed(2) + "%"

  );

  result.appendChild(resultText);

}

**Output:**

Graphical user interface, text, application, email

Description automatically generated

Graphical user interface, text, application

Description automatically generated

Table

Description automatically generated

**QUESTION 2:**

**Code:**

**Index1.html**

<!DOCTYPE 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" />

    <title>Days Left</title>

    <script src="script.js"></script>

  </head>

  <body>

    <h3>Days left for Next Christmas</h3>

    <button onclick="calculateDays()">Calculate Days Left</button>

    <p id="curr\_date"></p>

    <p id="result"></p>

  </body>

</html>

**script.js**

function calculateDays() {

  const today = new Date();

  const christmas\_date = new Date(today.getFullYear(), 11, 25);

  let convertedtime = 1000 \* 60 \* 60 \* 24;

  const daysLeft = Math.ceil(

    (christmas\_date.getTime() - today.getTime()) / convertedtime

  );

  document.getElementById("curr\_date").innerHTML = `Today's time: ${today}`;

  document.getElementById(

    "result"

  ).innerHTML = `There are ${daysLeft} days left until Christmas.`;

}

**Output:**

**Graphical user interface, application, Word

Description automatically generated**

**QUESTION 3:**

**Code:**

**index.html**

<!DOCTYPE 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" />

    <title>Mouse Coordinates</title>

    <script src="script.js"></script>

  </head>

  <body onmousemove="mouseCoordinates(event)">

    <h3>Mouse Coordinates</h3>

    <p id="cords">X: 0 , Y: 0</p>

  </body>

</html>

**script.js**

function mouseCoordinates(event) {

  const x = event.clientX;

  const y = event.clientY;

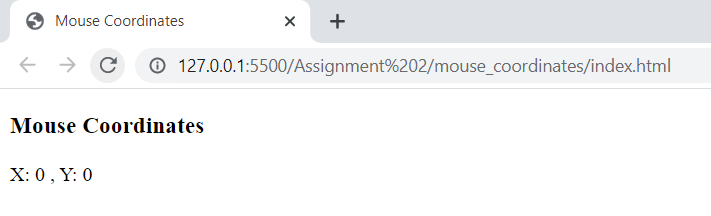
  const cords = document.getElementById("cords");

  cords.innerHTML = "X: " + x + "," + "Y:" + y;

}

**Output:**

Default mouse coordinates:



Normal mouse coordinates:

Graphical user interface, text, application, chat or text message

Description automatically generated