

## WT Lab

1, Design an Express application integrated with MongoDB that includes a user registration page and a feature to display all registered users, retrieving and rendering the user data from a MongoDB database.

reg.html

[illegible]

```

        <label>Reset</label>
        <input type="reset" name="re" id="re">
    </p>
</form>
</body>
</html>

```

index.js

```

//step-1 create a folder
//step-2 import package.json file (npm init)
//step-3 import express and mongoose (npm i express)(npm i mongoose)

//step-4 import required modules
let express=require('express');
let mongoose=require('mongoose');
let PORT=8085;
let app=express();

// to understand the post data in express

app.listen(PORT,(err,data)=>{
    if(err)
    {
        console.log(`Unable to connect to server`)
    }
    else
    {
        console.log(`Server is connected on port ${PORT}`)
    }
})

//step-5 connecting to MongoDB
mongoose.connect('mongodb://127.0.0.1:27017/csmc').then(()=>{
    console.log("MongoDB Server is Connected on Port:27017")
})

//step-6 create a schema
let myschema=new mongoose.Schema({
    fname:String,
    lname:String,
    uname:String,
    roll:String,
    email:String,
    pass:String,
    course:String,
    gender:String

```

```

}))

//step-7 Create a model
let mymodel=new mongoose.model('children',myschema);

//step-8 create routes
// example

// app.get('/spidey',(req,res)=>{
//     let mydata=new mymodel({fname:'spidey',lname:'koti',rno:'143'});
//     //to store the data into collection
//     mydata.save().then(=>{
//         res.send('Data inserted')
//     });
// })

app.get('/reg',(req,res)=>{
    res.sendFile(__dirname+'/reg.html')
})

//create
app.get('/regis',(req,res)=>{

    let mydata=new mymodel({
        fname:req.query.fname,
        lname:req.query.lname,
        uname:req.query.uname,
        roll:req.query.roll,
        email:req.query.mail,
        pass:req.query.pass,
        course:req.query.cname,
        gender:req.query.gen1,
    });
    //to store the data into collection
    mydata.save().then(=>{
        res.send(`

## 


```

```

        let tableHTML = `

# 


```

```

    let un1=req.query.uname;
    let ps1= req.query.pass;
    let em1=req.query.mail;
    let ht1=req.query.roll;
    let cr1=req.query.cname;
    let gn1=req.query.gen1;

    mymodel.updateOne({uname:un1,pass:ps1},{ $set:{fname:fn1,lname:ln1,email:em1,ro
ll:ht1,course:cr1,gender:gn1}}).then((users)=>{
        if(users)
        {
            res.send(`<h2> Hello ${un1} <br> Your Profile is successful
Changed <br> <a href="/"> Click Here goto Home page </a></h2>`);
        }
        else
        {
            res.send(`<h2>Sorry Invalid Username Or Password <br> <a href="/">
Click Here goto Home page </a> </h2>`)
        }
    })
})

app.get('/delete',(request,response)=>{
    response.sendFile(__dirname+'/delete.html');
})

app.get('/del',(req,res)=>{
    let u=req.query.uname;
    let p=req.query.pass;
    mymodel.deleteOne({uname:u,pass:p}).then((users)=>{
        if(users)
        {
            res.send(`<h2>${u} is Successfully Deleted<br> <a href="/"> Click
Here goto Home page </a> </h2>`);
        }
        else
        {
            res.send(`<h2>Invalid Details<br> <a href="/"> Click Here goto
Home page </a> </h2>`);
        }
    })
})

//step-9 Run server
//step-10 give request from browser

```

home.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Home Page</title>
</head>
<body>
  <h1>Welcome to CRUD Applications</h1>
  <hr>
  <a href="http://localhost:8085/login">Login</a>
  <a href="http://localhost:8085/reg">Register</a>
  <a href="http://localhost:8085/reg1">Register with Post</a>
  <a href="http://localhost:8085/edit">Edit Profile</a>
  <a href="http://localhost:8085/delete">Delete Profile</a>
  <a href="http://localhost:8085/showdata">Show Users</a>
  <hr>
</body>
</html>
```

2,a. Write a JavaScript program that takes name, rollno, marks(sub1 and sub2) from user from a form and on form submission displays them in a tabular format, with total marks(sub1+sub2) ( like a marks sheet)

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Marks Sheet</title>
  <!-- <style>
    table {
      border-collapse: collapse;
      width: 50%;
      margin: 20px;
    }

    th, td {
      border: 1px solid #dddddd;
      text-align: left;
      padding: 8px;
    }
  </style> -->
```

```

</head>
<body>

<form id="marksForm" align="center">
  <h2><b>Marks Sheet</b></h2><br>
  <label for="name">Name:</label>
  <input type="text" id="name" name="name" required><br><br>

  <label for="rollNo">Roll Number:</label>
  <input type="text" id="rollNo" name="rollNo" required><br><br>

  <label for="sub1">Marks in Subject 1:</label>
  <input type="number" id="sub1" name="sub1" required><br><br>

  <label for="sub2">Marks in Subject 2:</label>
  <input type="number" id="sub2" name="sub2" required><br><br>

  <input type="submit" value="Submit">
</form>

<div id="result"></div>

<script>
  document.getElementById("marksForm").addEventListener("submit",
function(event) {
    event.preventDefault();

    // Get form values
    var name = document.getElementById("name").value;
    var rollNo = document.getElementById("rollNo").value;
    var sub1 = parseInt(document.getElementById("sub1").value);
    var sub2 = parseInt(document.getElementById("sub2").value);

    // Calculate total marks
    var totalMarks = sub1 + sub2;

    // Display information in a table
    var resultTable = `<table border=1 align="center">`;
    resultTable += "<tr><th>Name</th><th>Roll Number</th><th>Subject
1</th><th>Subject 2</th><th>Total Marks</th></tr>";
    resultTable += "<tr><td>" + name + "</td><td>" + rollNo + "</td><td>"
+ sub1 + "</td><td>" + sub2 + "</td><td>" + totalMarks + "</td></tr>";
    resultTable += "</table>";

    // Display the result
    document.getElementById("result").innerHTML = resultTable;
  });
</script>

```

```
</body>
</html>
```

2,b.Create a Webpage of your current semester TimeTable, it should be in center (Apply rowspan,colspan when it needed)

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>CSM-C</title>
</head>
<body>
  <pre><b>                                with Effect From</b>:11-09-2-23
                                <b>SECTION:</b>C
    <b>ROOM NO:</b>B-413</pre>
  <table border="1" align="center" cellpadding="10">
    <tr>
      <td><b>Hour</b></td>
      <td>1</td>
      <td>2</td>
      <td rowspan="2">11:10-11:25</td>
      <td>3</td>
      <td>4</td>
      <td rowspan="2">1:05-2:00</td>
      <td>5</td>
      <td>6</td>
      <td>7</td>
    </tr>
    <tr>
      <td><b>Day</b></td>
      <td>9:30-10:20</td>
      <td>10:20-11:10</td>
      <td>11:25-12:15</td>
      <td>12:15-1:05</td>
      <td>2:00-2:50</td>
      <td>2:50-3:40</td>
      <td>3:40-4:30</td>
    </tr>
    <tr>
      <td><b>Monday</b></td>
      <td colspan="2" align="center">DLVS</td>
      <td rowspan="3"><b>Short Break</b></td>
      <td>PP</td>
      <td>SE</td>
```



```

        <td rowspan="6"><b>Lunch Break</b></td>
        <td>WT</td>
        <td colspan="2">DLVS/SE LAB</td>
    </tr>
    <tr>
        <td><b>Tuesday</b></td>
        <td colspan="2" align="center">DAA</td>
        <td>WT</td>
        <td>SE</td>
        <td>AI</td>
        <td colspan="2">DLVS/SE LAB</td>
    </tr>
    <tr>
        <td><b>Wednesday</b></td>
        <td colspan="2" align="center">DAA</td>
        <td>WT</td>
        <td>PP</td>
        <td>AI</td>
        <td colspan="2">WT LAB</td>
    </tr>
    <tr>
        <td><b>Thursday</b></td>
        <td colspan="2" align="center">DAA</td>
        <td>SE</td>
        <td>DLVS</td>
        <td>WT</td>
        <td>Mentoring</td>
        <td>PP</td>
    </tr>
    <tr>
        <td><b>Friday</b></td>
        <td colspan="2" align="center">DAA</td>
        <td>SE</td>
        <td>WT</td>
        <td>PP</td>
        <td colspan="2">DLVS</td>
    </tr>
    <tr>
        <td><b>Saturday</b></td>
        <td colspan="2" align="center">DAA</td>
        <td>PP</td>
        <td>AI</td>
        <td>SE</td>
        <td>DLVS</td>
        <td>WT</td>
    </tr>
</table>
</body>

```

```
</html>
```

3. Design an Express application integrated with MongoDB that includes a user registration page and integrate a functionality to modify user data in an Express application using MongoDB, ensuring that the changes are reflected in the database.

Refer index.js for update

edit.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Details</title>
</head>
<body>
  <h1 align="center">Student Registration Form</h1>
  <hr>
  <form action="http://localhost:8085/ed">
    <fieldset>
      <legend align="center"><h2><b>Register</b></h2></legend>
      <label for="fname">First Name: </label>
      <input type="text" name="fname" id="fname"><br><br>
      <label>Last Name: </label>
      <input type="text" name="lname" id="lname"><br><br>
      <label>User Name: </label>
      <input type="text" name="uname" id="uname"><br><br>
      <label>Hallticket No: </label>
      <input type="text" name="roll" id="roll"><br><br>
      <label>Email: </label>
      <input type="Email" name="mail" id="mail"><br><br>
      <label>Password: </label>
      <input type="password" name="pass" id="pass"><br><br>
      <label>Course: </label>
      <select name="cname" id="cname">
        <option>AIML</option>
        <option>CSE</option>
        <option>IT</option>
      </select><br><br>
      <label>Gender: </label>
      <label>Male</label>
      <input type="radio" name="gen1" id="gen1">
      <label>Female</label>
      <input type="radio" name="gen1" id="gen1"><br><br>
      <p align="center">
        <label>Submit</label>
      </p>
    </fieldset>
  </form>

```

```
<input type="submit" name="sub"  
id="sub">&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;  
    <label>Reset</label>  
    <input type="reset" name="re" id="re">  
</p>  
</form>  
</body>  
</html>
```

Refer [home.html](#) for update link

4, a. Write a JavaScript program to remove duplicate items from an array (ignore case sensitivity)

```
function removeDuplicatesIgnoreCase(arr) {
  // Create a set to store unique lowercase versions of array elements
  const uniqueSet = new Set();

  // Filter the array to remove duplicates (ignore case)
  const uniqueArray = arr.filter(item => {
    const lowercaseItem = item.toLowerCase(); // Convert to lowercase
    if (!uniqueSet.has(lowercaseItem)) {
      uniqueSet.add(lowercaseItem);
      return true;
    }
    return false;
  });

  return uniqueArray;
}

// Example usage:
const inputArray = ["apple", "Orange", "banana", "orange", "APPLE"];
const resultArray = removeDuplicatesIgnoreCase(inputArray);
console.log(resultArray);
```

4.b.Create a Wegpage contains all type of text formats, all elements, typography, form, table, footer, images, links, lists,

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Your Webpage</title>
  <!-- Add Bootstrap CSS link -->
```

```

    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css
">
    <style>
        body {
            padding-top: 60px; /* Adjusted for fixed navbar */
        }
    </style>
</head>
<body>

    <!-- Navbar -->
    <nav class="navbar navbar-expand-lg navbar-dark bg-dark fixed-top">
        <a class="navbar-brand" href="#">Your Webpage</a>
        <button class="navbar-toggler" type="button" data-toggle="collapse" data-
target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-
label="Toggle navigation">
            <span class="navbar-toggler-icon"></span>
        </button>
        <div class="collapse navbar-collapse" id="navbarNav">
            <ul class="navbar-nav ml-auto">
                <li class="nav-item">
                    <a class="nav-link" href="#text">Text Formats</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="#elements">Elements</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="#typography">Typography</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="#forms">Forms</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="#tables">Tables</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="#footer">Footer</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="#images">Images</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="#links">Links</a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="#lists">Lists</a>
                </li>
            </ul>
        </div>
    </nav>

```

```

        </ul>
    </div>
</nav>

<!-- Text Formats -->
<div class="container mt-5" id="text">
    <h2>Text Formats</h2>
    <p><strong>Bold Text</strong></p>
    <p><em>Italic Text</em></p>
    <p><u>Underlined Text</u></p>
    <p>This is <sub>subscript</sub> text.</p>
    <p>This is <sup>superscript</sup> text.</p>
</div>

<!-- Elements -->
<div class="container mt-5" id="elements">
    <h2>Elements</h2>
    <p>This is a paragraph.</p>
    <blockquote class="blockquote">
        <p class="mb-0">This is a blockquote.</p>
        <footer class="blockquote-footer">Someone famous</footer>
    </blockquote>
    <code>This is inline code.</code>
    <pre><code>This is a code block.</code></pre>
</div>

<!-- Typography -->
<div class="container mt-5" id="typography">
    <h2>Typography</h2>
    <h1>Heading 1</h1>
    <h2>Heading 2</h2>
    <h3>Heading 3</h3>
    <h4>Heading 4</h4>
    <h5>Heading 5</h5>
    <h6>Heading 6</h6>
</div>

<!-- Forms -->
<div class="container mt-5" id="forms">
    <h2>Forms</h2>
    <form>
        <div class="form-group">
            <label for="exampleFormControlInput1">Email address</label>
            <input type="email" class="form-control" id="exampleFormControlInput1"
placeholder="name@example.com">
        </div>
        <div class="form-group">
            <label for="exampleFormControlSelect1">Example select</label>

```

```

        <select class="form-control" id="exampleFormControlSelect1">
            <option>Option 1</option>
            <option>Option 2</option>
            <option>Option 3</option>
        </select>
    </div>
    <div class="form-group">
        <label for="exampleFormControlTextarea1">Example textarea</label>
        <textarea class="form-control" id="exampleFormControlTextarea1"
rows="3"></textarea>
    </div>
    <button type="submit" class="btn btn-primary">Submit</button>
</form>
</div>

<!-- Tables -->
<div class="container mt-5" id="tables">
    <h2>Tables</h2>
    <table class="table">
        <thead>
            <tr>
                <th scope="col">#</th>
                <th scope="col">First</th>
                <th scope="col">Last</th>
                <th scope="col">Handle</th>
            </tr>
        </thead>
        <tbody>
            <tr>
                <th scope="row">1</th>
                <td>Mark</td>
                <td>Otto</td>
                <td>@mdo</td>
            </tr>
            <tr>
                <th scope="row">2</th>
                <td>Jacob</td>
                <td>Thornton</td>
                <td>@fat</td>
            </tr>
            <tr>
                <th scope="row">3</th>
                <td>Larry</td>
                <td>the Bird</td>
                <td>@twitter</td>
            </tr>
        </tbody>
    </table>

```

```

</div>

<!-- Footer -->
<div class="container mt-5" id="footer">
  <footer class="text-center">
    <p>&copy; 2024 Your Webpage. All Rights Reserved.</p>
  </footer>
</div>

<!-- Images -->
<div class="container mt-5" id="images">
  <h2>Images</h2>
  
</div>

<!-- Links -->
<div class="container mt-5" id="links">
  <h2>Links</h2>
  <p><a href="https://www.example.com" target="_blank">Visit
Example.com</a></p>
</div>

<!-- Lists -->
<div class="container mt-5" id="lists">
  <h2>Lists

```

5,a. Write a JavaScript program to find the most frequent item of an array

```

function findMostFrequentItem(arr) {
  // Create an object to store the frequency of each element
  const frequencyMap = {};

  // Iterate through the array and count the frequency of each element
  arr.forEach(item => {
    frequencyMap[item] = (frequencyMap[item] || 0) + 1;
  });

  // Find the element with the maximum frequency
  let mostFrequentItem;
  let maxFrequency = 0;

  for (const key in frequencyMap) {
    if (frequencyMap[key] > maxFrequency) {
      mostFrequentItem = key;
      maxFrequency = frequencyMap[key];
    }
  }
}

```

```

    }

    return mostFrequentItem;
}

// Example usage:
const array = [1, 2, 3, 2, 2, 4, 5, 2, 6];
const mostFrequent = findMostFrequentItem(array);

console.log(`Most frequent item: ${mostFrequent}`);

```

b. Create a Responsive E-Commerce website for mobiles using bootstrap Cards & Grids

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css"
rel="stylesheet" integrity="sha384-
T3c6CoIi6uLrA9TneNEoa7RxnatzjcDSCmG1MXxSR1GAsXEV/Dwwykc2MPK8M2HN"
crossorigin="anonymous">
</head>
<body>
  <div class="container">
    <h1 class="text-center">Card Example </h1> <hr>
    <form action="">
      <div class="row">
        <div class="col-sm-12 col-md-6 col-lg-3">
          <div class="card">
            
            <div class="card-body">
              <div class="card-title"> <b>Oppo 5.X</b></div>
              <div class="card-text"> Lorem ipsum dolor sit amet
consectetur adipisicing elit. Animi veniam sed impedit, repellendus dolore
quae provident, quisquam voluptate quos molestiae placeat rerum ipsam, in id
unde asperiores est sint tempora!</div>
              <h1 class="btn btn-info" >Add to card</h1>
            </div>
          </div>
          <div class="col-sm-12 col-md-6 col-lg-3">
            <div class="card">

```



```

        
        <div class="card-body">
            <div class="card-title"> <b>Oppo 5.X</b></div>
            <div class="card-text"> Lorem ipsum dolor sit amet
consectetur adipisicing elit. Animi veniam sed impedit, repellendus dolore
quae provident, quisquam voluptate quos molestiae placeat rerum ipsam, in id
unde asperiores est sint tempora!</div>
            <h1 class="btn btn-info" >Add to card</h1>
        </div>
    </div>
</div>
<div class="col-sm-12 col-md-6 col-lg-3">
    <div class="card">
        
        <div class="card-body">
            <div class="card-title"> <b>Oppo 5.X</b></div>
            <div class="card-text"> Lorem ipsum dolor sit amet
consectetur adipisicing elit. Animi veniam sed impedit, repellendus dolore
quae provident, quisquam voluptate quos molestiae placeat rerum ipsam, in id
unde asperiores est sint tempora!</div>
            <h1 class="btn btn-info" >Add to card</h1>
        </div>
    </div>
</div>
<div class="col-sm-12 col-md-6 col-lg-3">
    <div class="card">
        
        <div class="card-body">
            <div class="card-title"> <b>Oppo 5.X</b></div>
            <div class="card-text"> Lorem ipsum dolor sit amet
consectetur adipisicing elit. Animi veniam sed impedit, repellendus dolore
quae provident, quisquam voluptate quos molestiae placeat rerum ipsam, in id
unde asperiores est sint tempora!</div>
            <h1 class="btn btn-info" >Add to card</h1>
        </div>
    </div>
</div>
<div class="col-sm-12 col-md-6 col-lg-3">
    <div class="card">
        
        <div class="card-body">
            <div class="card-title"> <b>Oppo 5.X</b></div>
            <div class="card-text"> Lorem ipsum dolor sit amet
consectetur adipisicing elit. Animi veniam sed impedit, repellendus dolore

```

```

    quae provident, quisquam voluptate quos molestiae placeat rerum ipsam, in id
    unde asperiores est sint tempora!</div>
        <h1 class="btn btn-info" >Add to card</h1>
    </div>
</div>

</div>
<div class="col-sm-12 col-md-6 col-lg-3">
    <div class="card">
        
        <div class="card-body">
            <div class="card-title"> <b>Oppo 5.X</b></div>
            <div class="card-text"> Lorem ipsum dolor sit amet
consectetur adipisicing elit. Animi veniam sed impedit, repellendus dolore
quae provident, quisquam voluptate quos molestiae placeat rerum ipsam, in id
unde asperiores est sint tempora!</div>
                <h1 class="btn btn-info" >Add to card</h1>
            </div>
        </div>
    </div>
</div>

</form>
</div>
</body>
</html>

```

6. Design an Express application integrated with MongoDB that includes a user registration page and integrating a delete user page, ensuring that user data is removed from the database upon deletion.

Refer index.js for deletion

delete.html

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Details</title>
</head>
<body>
    <h2>Enter the Username to delete the details</h2>
    <form action="http://localhost:8085/del">
        <table>User Name: </table>
        <input type="text" name="uname" id="uname"><br><br>
        <table>Password: </table>
    </form>

```

```

        <input type="password" name="pass" id="pass"><br><br>
        <label>Delete</label>
        <input type="submit" name="sub" id="sub">
    </form>
</body>
</html>

```

Refer home.html for delete link

7,a. Write a JavaScript program to read the employee data(name,id,salary and commision) from form and display the data in a table with total salary(salary+commision) (HTML page)

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Employee</title>
</head>
<body>
    <form id="employeeForm" align="center">
        <h2>Employee Data Form</h2>
        <label for="name">Name:</label>
        <input type="text" id="name" name="name" required><br><br>

        <label for="id">ID:</label>
        <input type="text" id="id" name="id" required><br><br>

        <label for="salary">Salary:</label>
        <input type="number" id="salary" name="salary" required><br><br>

        <label for="commission">Commission:</label>
        <input type="number" id="commission" name="commission" required><br><br>

        <input type="submit" value="Submit">
    </form>

    <div id="result"></div>

    <script>
        document.getElementById("employeeForm").addEventListener("submit",
        function(event) {
            event.preventDefault();

            // Get form values
            const name = document.getElementById("name").value;
            const id = document.getElementById("id").value;
            const salary = parseFloat(document.getElementById("salary").value);

```

```

        const commission =
parseFloat(document.getElementById("commission").value);

        // Calculate total salary
        const totalSalary = salary + commission;
        // Calculate total marks

        // Display information in a table
        var resultTable = `<table border=1 align="center">`;
        resultTable +=
"<tr><th>Name</th><th>ID</th><th>Salary</th><th>Commission</th><th>Total
salary</th></tr>";
        resultTable += "<tr><td>" + name + "</td><td>" + id + "</td><td>" +
salary + "</td><td>" + commission + "</td><td>" + totalSalary + "</td></tr>";
        resultTable += "</table>";

        // Display the result
        document.getElementById("result").innerHTML = resultTable;
    });
</script>

</body>
</html>

```

7,b.Create a Static Student Registration form using set of form components like text fields, passwords, radio buttons, check boxes, textarea, selections, formfield with legend, etc.

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Details</title>
</head>
<body>
    <h1 align="center">Student Registration Form</h1>
    <hr>
    <form>
        <fieldset>
            <legend align="center"><h2><b>Register</b></h2></legend>
            <label for="fname">First Name: </label>
            <input type="text" name="fname" id="fname"><br><br>
            <label>Last Name: </label>
            <input type="text" name="lname" id="lname"><br><br>
            <label>Hallticket No: </label>
            <input type="text" name="roll" id="roll"><br><br>
            <label>Email: </label>

```



```
console.log(`Swapped String: ${swappedString}`);
```

b. Create menubar for your index.html webpage that contains the menu items like Home, Projects, Education, Assignments

with bootstrap

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Your Webpage with Bootstrap</title>
  <!-- Add Bootstrap CSS link -->
  <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css"
">
</head>
<body>

  <nav class="navbar navbar-expand-lg navbar-light bg-light">
    <a class="navbar-brand" href="#">Your Webpage</a>
    <button class="navbar-toggler" type="button" data-toggle="collapse" data-
target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-
label="Toggle navigation">
      <span class="navbar-toggler-icon"></span>
    </button>
    <div class="collapse navbar-collapse" id="navbarNav">
      <ul class="navbar-nav">
        <li class="nav-item">
          <a class="nav-link" href="#home">Home</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="#projects">Projects</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="#education">Education</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="#assignments">Assignments</a>
        </li>
      </ul>
    </div>
  </nav>

  <div class="container mt-3">
    <!-- Your webpage content goes here -->
    <p>Welcome to your webpage!</p>
```

```

</div>

<!-- Add Bootstrap JS and Popper.js scripts (required for Bootstrap
functionality) -->
<script src="https://code.jquery.com/jquery-3.5.1.slim.min.js"></script>
<script
src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.11.6/dist/umd/popper.min.js
"></script>
<script
src="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js"><
/script>

</body>
</html>

```

Or

Without bootstrap

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Your Webpage</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      margin: 0;
      padding: 0;
    }
    header {
      background-color: #333;
      padding: 15px;
      text-align: center;
    }
    nav {
      background-color: #eee;
      overflow: hidden;
    }
    nav a {
      float: left;
      display: block;
      color: #333;
      text-align: center;
      padding: 14px 16px;
      text-decoration: none;
    }

```

```

    nav a:hover {
      background-color: #ddd;
      color: #333;
    }
  </style>
</head>
<body>

  <header>
    <h1>Your Webpage</h1>
  </header>

  <nav>
    <a href="#home">Home</a>
    <a href="#projects">Projects</a>
    <a href="#education">Education</a>
    <a href="#assignments">Assignments</a>
  </nav>

  <div>
    <!-- Your webpage content goes here -->
    <p>Welcome to your webpage!</p>
  </div>

</body>
</html>

```

9, Design an Express application integrated with MongoDB that includes a user registration page and a login page to securely store user credentials and authenticate users.

Refer index.js for login code

login.html

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
</head>
<body>
  <form action="http://localhost:8085/log">
    <label for="uname">User Name: </label>
    <input type="text" name="uname" id="uname"><br><br>
    <label>Password: </label>
    <input type="password" name="pass" id="pass"><br><br>
    <label>Submit</label>
  </form>

```



```
        <input type="submit" name="sub" id="sub">
    </form>
</body>
</html>
```

Refer home.html for links

success.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
    <h1>Your Login is Success</h1>
    <a href="http://localhost:8085/">Home</a>
</body>
</html>
```

fail.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
</head>
<body>
    <h1>Your Login is Failed</h1>
    <a href="http://localhost:8085/">Home</a>
</body>
</html>
```