

# Lab 3: Bootstrap

Date: 24/01/2026

**Q1. Design the student bio-data form using button, label, textbox, radio button, table and checkbox.**

**Code:**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Student Bio-Data Form</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.8/dist/css/bootstrap.min.css"
rel="stylesheet">
  <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.8/dist/js/bootstrap.bundle.min.j
s"></script>
</head>
<body class="bg-light">
  <div class="container mt-5">
    <div class="card shadow-lg">
      <div class="card-header bg-primary text-white">
        <h2 class="mb-0">Student Bio-Data Form</h2>
      </div>
      <div class="card-body">
        <form>
          <h4 class="mb-3">Personal Information</h4>
          <div class="row mb-3">
            <div class="col-md-6">
              <label for="studentName" class="form-label">Full Name</label>
              <input type="text" class="form-control" id="studentName"
placeholder="Enter your full name" required>
              <div class="invalid-feedback">Name is required.</div>
            </div>
            <div class="col-md-6">
              <label for="studentEmail" class="form-label">Email</label>
              <input type="email" class="form-control" id="studentEmail"
placeholder="Enter your email" required>
              <div class="invalid-feedback">Please enter a valid email
address.</div>
            </div>
          </div>
        </form>
      </div>
    </div>
  </div>
```

```

</div>
<div class="row mb-3">
  <div class="col-md-6">
    <label for="studentPhone" class="form-label">Phone Number</label>
    <input type="tel" class="form-control" id="studentPhone"
placeholder="Enter your phone number" pattern="[0-9]+" required>
    <div class="invalid-feedback">Please enter digits only (0-
9).</div>
  </div>
  <div class="col-md-6">
    <label for="studentDOB" class="form-label">Date of Birth</label>
    <input type="date" class="form-control" id="studentDOB" required>
    <div class="invalid-feedback">Date of birth is required.</div>
  </div>
</div>
<div class="mb-3">
  <label class="form-label">Gender</label><br>
  <div class="form-check form-check-inline">
    <input class="form-check-input" type="radio" name="gender"
id="male" value="Male" required>
    <label class="form-check-label" for="male">Male</label>
  </div>
  <div class="form-check form-check-inline">
    <input class="form-check-input" type="radio" name="gender"
id="female" value="Female">
    <label class="form-check-label" for="female">Female</label>
  </div>
  <div class="form-check form-check-inline">
    <input class="form-check-input" type="radio" name="gender"
id="other" value="Other">
    <label class="form-check-label" for="other">Other</label>
  </div>
  <div class="invalid-feedback">Please select a gender.</div>
</div>
<h4 class="mb-3">Academic Information</h4>
<div class="row mb-3">
  <div class="col-md-6">
    <label for="studentCourse" class="form-label">Course</label>
    <input type="text" class="form-control" id="studentCourse"
placeholder="e.g. B.Sc Computer Science" required>
    <div class="invalid-feedback">Course is required.</div>
  </div>
  <div class="col-md-6">
    <label for="studentYear" class="form-label">Year of Study</label>
    <select class="form-select" id="studentYear" required>
      <option selected disabled value="">Choose...</option>
      <option>1st Year</option>
    </select>
  </div>
</div>

```

```
        <option>2nd Year</option>
        <option>3rd Year</option>
        <option>Final Year</option>
    </select>
    <div class="invalid-feedback">Please select your year of
study.</div>
</div>
<div class="row mt-3">
    <div class="col-md-6">
        <label for="studentMentor" class="form-label">Mentor
Name</label>
        <input type="text" class="form-control" id="studentMentor"
placeholder="Enter name of mentor" required>
        <div class="invalid-feedback">Mentor is required.</div>
    </div>
</div>
<div class="mt-4">
    <button type="submit" class="btn btn-success">Submit</button>
    <button type="reset" class="btn btn-danger">Reset</button>
</div>
</form>
</div>
</div>
</div>
</body>
</html>
```

**Output:**

The screenshot shows a web browser with multiple tabs. The active tab is 'Student Bio-Data Form'. The form is titled 'Student Bio-Data Form' and is divided into two sections: 'Personal Information' and 'Academic Information'.

**Personal Information:**

- Full Name: Dhruv Phalod
- Email: dhruv@mit.com
- Phone Number: 9930500690
- Date of Birth: 11 / 10 / 2005
- Gender: ☒ Male ☐ Female ☐ Other

**Academic Information:**

- Course: Computer Science and Engineering
- Year of Study: 3rd Year
- Mentor Name: Sahana Roshan

At the bottom of the form are two buttons: 'Submit' (green) and 'Reset' (red).

## 2. Design a web page which shows the database-oriented CRUD operation. Consider Employee data.

**Code:**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Employee Management</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link href="https://cdn.jsdelivr.net/npm/bootstrap/dist/css/bootstrap.min.css"
rel="stylesheet">
  <script
src="https://cdn.jsdelivr.net/npm/bootstrap/dist/js/bootstrap.bundle.min.js"></
script>
</head>
<body class="bg-light">
  <div class="container mt-5">
    <div class="card shadow-lg">
      <div class="card-header bg-primary text-white d-flex justify-content-
between align-items-center">
        <h2 class="mb-0">Employee Management</h2>
```

```
<button class="btn btn-success" onclick="openModal('add')">+ Add
Employee</button>
</div>
<div class="card-body">
  <table class="table table-hover table-bordered" id="employeeTable">
    <thead class="table-dark">
      <tr>
        <th>ID</th>
        <th>Name</th>
        <th>Email</th>
        <th>Department</th>
        <th>Salary</th>
        <th>Actions</th>
      </tr>
    </thead>
    <tbody></tbody>
  </table>
</div>
</div>
</div>

<div class="modal fade" id="employeeModal" tabindex="-1" aria-hidden="true">
  <div class="modal-dialog">
    <form class="modal-content" id="employeeForm">
      <div class="modal-header">
        <h5 class="modal-title" id="modalTitle">Add Employee</h5>
        <button type="button" class="btn-close" data-bs-
dismiss="modal"></button>
      </div>
      <div class="modal-body">
        <input type="hidden" id="editIndex">
        <div class="mb-3">
          <label class="form-label">ID</label>
          <input type="number" class="form-control" id="empId" required>
        </div>
        <div class="mb-3">
          <label class="form-label">Name</label>
          <input type="text" class="form-control" id="empName" required>
        </div>
        <div class="mb-3">
          <label class="form-label">Email</label>
          <input type="email" class="form-control" id="empEmail" required>
        </div>
        <div class="mb-3">
          <label class="form-label">Department</label>
          <input type="text" class="form-control" id="empDept" required>
        </div>
      </div>
    </form>
  </div>
</div>
```

```

        <div class="mb-3">
            <label class="form-label">Salary</label>
            <input type="number" class="form-control" id="empSalary" required>
        </div>
    </div>
    <div class="modal-footer">
        <button type="submit" class="btn btn-primary"
id="modalActionBtn">Save</button>
        <button type="button" class="btn btn-secondary" data-bs-
dismiss="modal">Cancel</button>
    </div>
</form>
</div>
</div>

<script>
    let employees = [
        { id: 101, name: "John Doe", email: "john@example.com", dept: "HR",
salary: 45000 },
        { id: 102, name: "Mary Smith", email: "mary@example.com", dept: "Finance",
salary: 55000 }
    ];

    function renderTable() {
        const tbody = document.querySelector("#employeeTable tbody");
        tbody.innerHTML = "";
        employees.forEach((emp, index) => {
            tbody.insertAdjacentHTML("beforeend", `
                <tr>
                    <td>${emp.id}</td>
                    <td>${emp.name}</td>
                    <td>${emp.email}</td>
                    <td>${emp.dept}</td>
                    <td>${emp.salary}</td>
                    <td>
                        <button class="btn btn-warning btn-sm" onclick="openModal('edit',
${index})">Edit</button>
                        <button class="btn btn-danger btn-sm" onclick="deleteEmployee($
{index})">Delete</button>
                    </td>
                </tr>
            `);
        });
    }

    function openModal(mode, index = null) {
        const modalTitle = document.getElementById("modalTitle");

```

```
const modalActionBtn = document.getElementById("modalActionBtn");
const form = document.getElementById("employeeForm");

if (mode === "add") {
    modalTitle.textContent = "Add Employee";
    modalActionBtn.textContent = "Save";
    form.reset();
    document.getElementById("editIndex").value = "";
} else {
    modalTitle.textContent = "Edit Employee";
    modalActionBtn.textContent = "Update";
    const emp = employees[index];
    document.getElementById("empId").value = emp.id;
    document.getElementById("empName").value = emp.name;
    document.getElementById("empEmail").value = emp.email;
    document.getElementById("empDept").value = emp.dept;
    document.getElementById("empSalary").value = emp.salary;
    document.getElementById("editIndex").value = index;
}

new bootstrap.Modal(document.getElementById("employeeModal")).show();
}

document.getElementById("employeeForm").addEventListener("submit",
function(e) {
    e.preventDefault();
    const index = document.getElementById("editIndex").value;
    const empData = {
        id: parseInt(document.getElementById("empId").value),
        name: document.getElementById("empName").value,
        email: document.getElementById("empEmail").value,
        dept: document.getElementById("empDept").value,
        salary: parseFloat(document.getElementById("empSalary").value)
    };

    if (index === "") {
        employees.push(empData);
    } else {
        employees[index] = empData;
    }

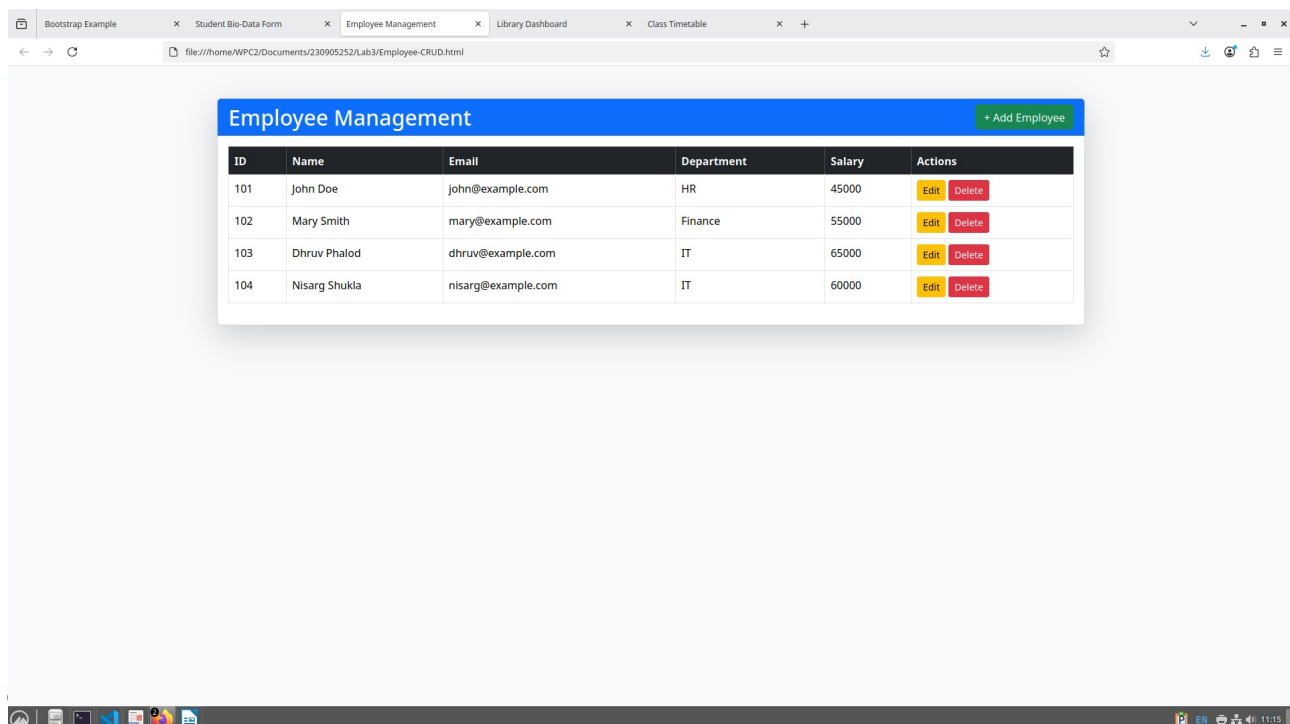
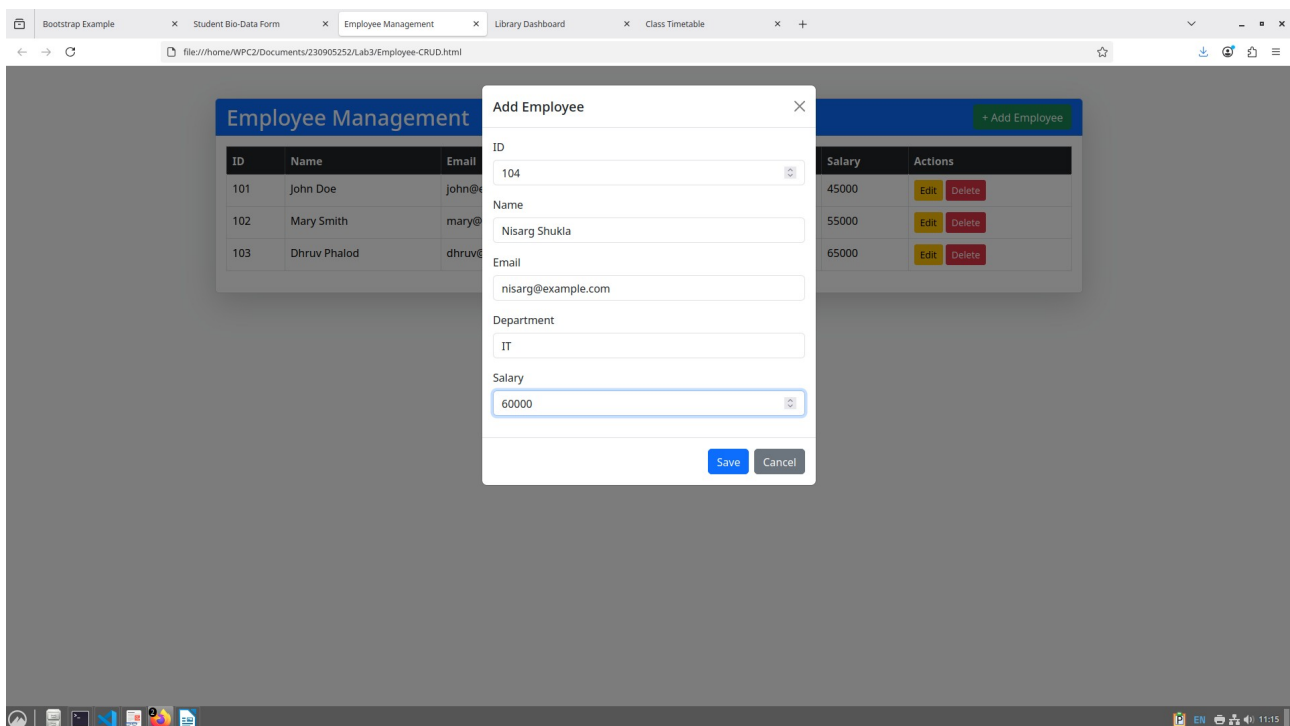
    renderTable();

    bootstrap.Modal.getInstance(document.getElementById("employeeModal")).hide();
});

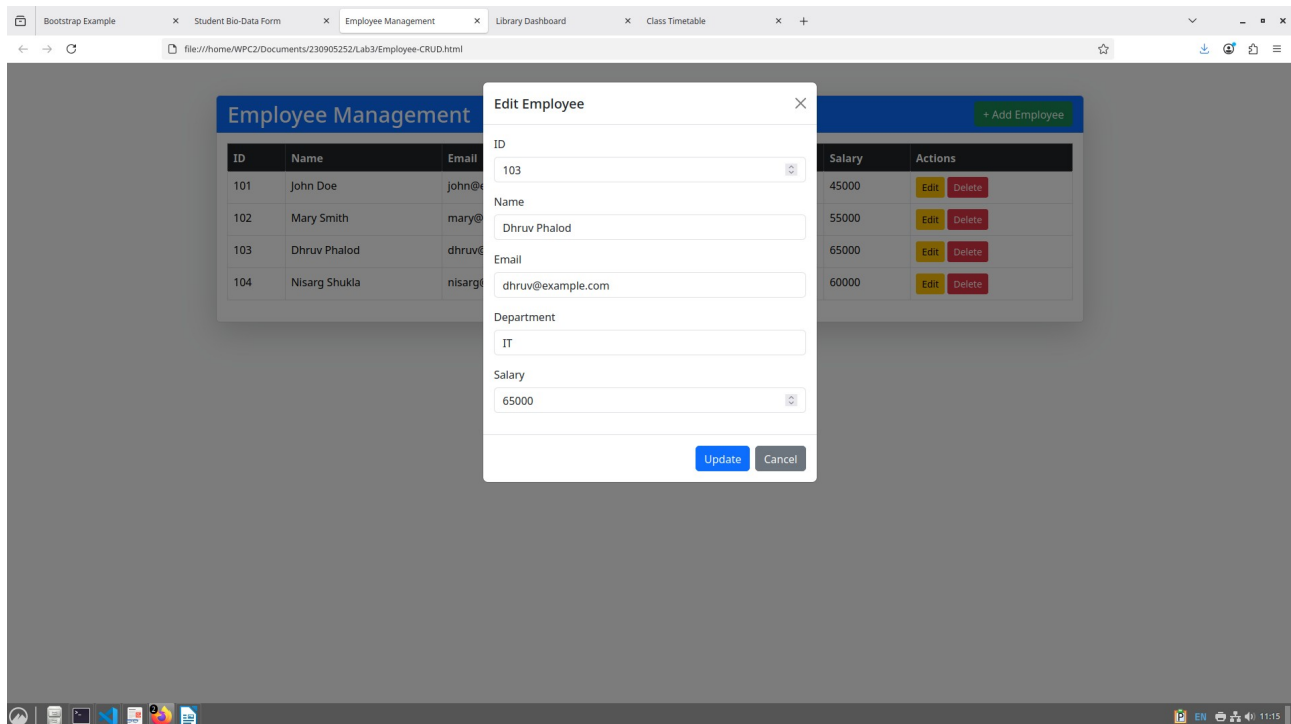
function deleteEmployee(index) {
```

```
employees.splice(index, 1);  
renderTable();  
}  
  
renderTable();  
</script>  
</body>  
</html>
```

## Output:







**3. Create a web page using bootstrap as mentioned. Divide the page into 2 parts top and bottom, then divide the bottom into 3 parts and design each top and bottom part using different input groups, input, badges, buttons and button groups. Make the design more attractive.**

### Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Library Dashboard</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link href="https://cdn.jsdelivr.net/npm/bootstrap/dist/css/bootstrap.min.css"
rel="stylesheet">
  <script
src="https://cdn.jsdelivr.net/npm/bootstrap/dist/js/bootstrap.bundle.min.js"></
script>
</head>
<body class="bg-light">
  <div class="container mt-4">
    <div class="card shadow-lg mb-4">
      <div class="card-header bg-primary text-white">
        <h3 class="mb-0">Library Dashboard</h3>
```

```

</div>
<div class="card-body">
  <div class="input-group mb-3">
    <span class="input-group-text">Member ID</span>
    <input type="text" class="form-control" placeholder="Enter member ID">
    <button class="btn btn-success">Search</button>
  </div>
  <div class="d-flex align-items-center">
    <h5 class="me-3">Pending Requests <span class="badge bg-
danger">5</span></h5>
    <div class="btn-group">
      <button class="btn btn-outline-primary">Profile</button>
      <button class="btn btn-outline-secondary">Settings</button>
      <button class="btn btn-outline-danger">Logout</button>
    </div>
  </div>
</div>
</div>
<div class="row">
  <div class="col-md-4 mb-4">
    <div class="card shadow-sm h-100">
      <div class="card-header bg-success text-white">
        <h5 class="mb-0">Add New Book</h5>
      </div>
      <div class="card-body">
        <div class="input-group mb-3">
          <span class="input-group-text">ISBN</span>
          <input type="text" class="form-control" placeholder="Enter ISBN">
        </div>
        <button class="btn btn-success me-2">Add</button>
        <button class="btn btn-outline-dark">Cancel</button>
      </div>
    </div>
  </div>
  <div class="col-md-4 mb-4">
    <div class="card shadow-sm h-100">
      <div class="card-header bg-warning text-dark">
        <h5 class="mb-0">Issue Book</h5>
      </div>
      <div class="card-body">
        <div class="input-group mb-3">
          <button class="btn btn-outline-secondary dropdown-toggle"
type="button" data-bs-toggle="dropdown">Member</button>
          <ul class="dropdown-menu">
            <li><a class="dropdown-item" href="#">Member A</a></li>
            <li><a class="dropdown-item" href="#">Member B</a></li>
          </ul>
        </div>
      </div>
    </div>
  </div>
</div>

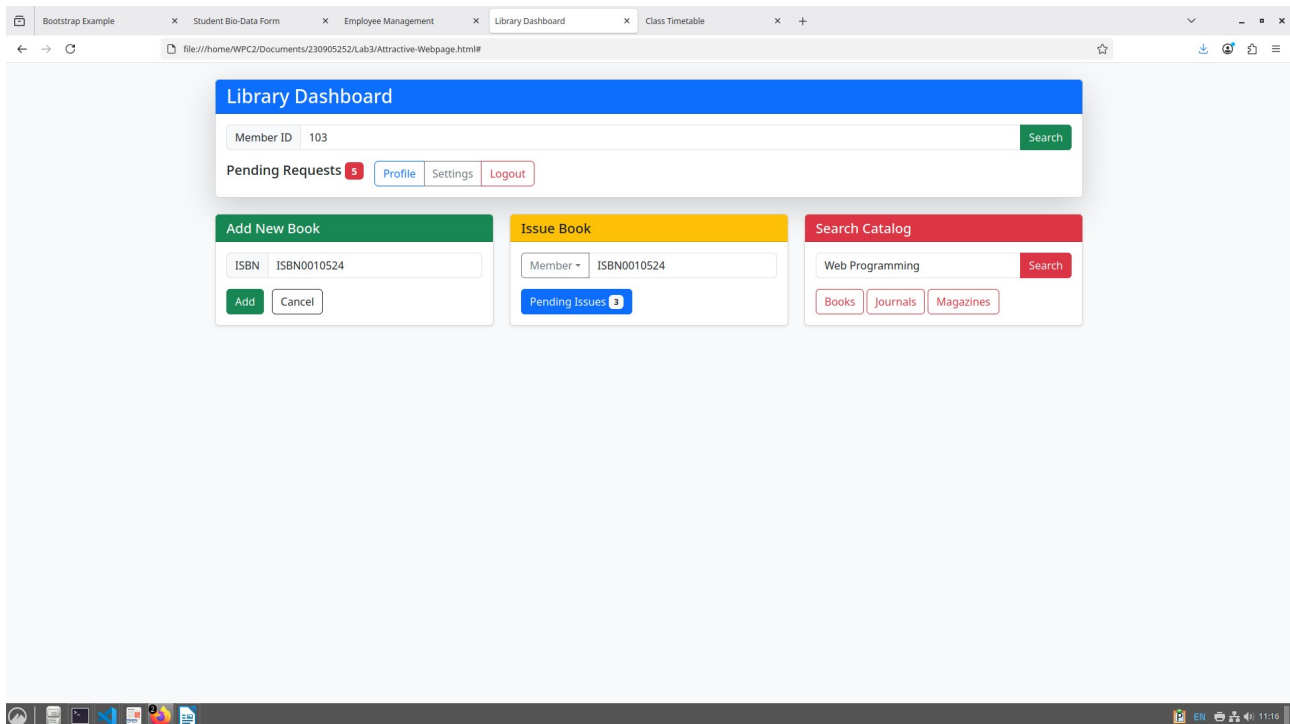
```

```

        <input type="text" class="form-control" placeholder="Book ID">
      </div>
      <button class="btn btn-primary">
        Pending Issues <span class="badge bg-light text-dark">3</span>
      </button>
    </div>
  </div>
</div>
<div class="col-md-4 mb-4">
  <div class="card shadow-sm h-100">
    <div class="card-header bg-danger text-white">
      <h5 class="mb-0">Search Catalog</h5>
    </div>
    <div class="card-body">
      <div class="input-group mb-3">
        <input type="text" class="form-control" placeholder="Search by
title or author">
        <button class="btn btn-danger">Search</button>
      </div>
      <div class="d-flex flex-wrap gap-1">
        <button class="btn btn-outline-danger">Books</button>
        <button class="btn btn-outline-danger">Journals</button>
        <button class="btn btn-outline-danger">Magazines</button>
      </div>
    </div>
  </div>
</div>
</div>
</div>
</body>
</html>

```

**Output:**



## 4. Design your class timetable using bootstrap table and carousel.

### Code:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Class Timetable</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link href="https://cdn.jsdelivr.net/npm/bootstrap/dist/css/bootstrap.min.css"
rel="stylesheet">
  <script
src="https://cdn.jsdelivr.net/npm/bootstrap/dist/js/bootstrap.bundle.min.js"></
script>
  <style>
    td, th { text-align: center; vertical-align: middle; }
  </style>
</head>
<body class="bg-light">

<div class="container mt-4">
  <h2 class="text-center mb-4">Weekly Class Timetable</h2>

  <div class="card shadow-lg mb-5">
```

```
<div class="card-header bg-primary text-white">
  <h4 class="mb-0">Full Week Grid</h4>
</div>
<div class="card-body table-responsive">
  <table class="table table-bordered table-hover">
    <thead class="table-dark">
      <tr>
        <th>Day</th>
        <th>08:00-09:00</th>
        <th>09:00-10:00</th>
        <th>10:00-10:30</th>
        <th>10:30-11:30</th>
        <th>11:30-12:30</th>
        <th>12:30-13:00</th>
        <th>13:00-14:00</th>
        <th>14:00-15:00</th>
        <th>15:00-15:30</th>
        <th>15:30-16:30</th>
      </tr>
    </thead>
    <tbody>
      <tr><td>Monday</td><td>PE -
1</td><td>PCAP</td><td></td><td>CD</td><td>OE</td><td></td><td></td><td></td><td></td><td></td></tr>
      <tr><td>Tuesday</td><td></td><td colspan="3">CD Lab
(C1)</td><td></td><td></td><td>PE - 2</td><td>EEFM</td><td></td><td></td></tr>
      <tr><td>Wednesday</td><td>PE - 2</td><td>EEFM</td><td></td><td>PE - 1</td><td>PCAP</td><td></td><td></td><td colspan="3">WP Lab (C1)</td></tr>
      <tr><td>Thursday</td><td></td><td colspan="3">PP Lab
(C2)</td><td></td><td></td><td>CD</td><td>OE</td><td></td><td></td></tr>
      <tr><td>Friday</td><td>CD</td><td>OE</td><td></td><td>PE -
2</td><td>EEFM</td><td></td><td></td><td colspan="3">PP Lab (C1) + CD Lab
(C2)</td></tr>
      <tr><td>Saturday</td><td></td><td colspan="3">WP Lab
(C2)</td><td></td><td></td><td>PE - 1</td><td>PCAP</td><td></td><td></td></tr>
    </tbody>
  </table>
</div>
</div>

<div class="card shadow-lg">
  <div class="card-header bg-success text-white">
    <h4 class="mb-0">Daily View</h4>
  </div>
  <div class="card-body">
    <div id="timetableCarousel" class="carousel slide" data-bs-
ride="carousel">
```

```

<div class="carousel-inner">
  <div class="carousel-item active">
    <h5 class="text-primary">Monday</h5>
    <ul class="list-group">
      <li class="list-group-item">08:00-09:00 → PE-1</li>
      <li class="list-group-item">09:00-10:00 → PCAP</li>
      <li class="list-group-item">10:30-11:30 → CD</li>
      <li class="list-group-item">11:30-12:30 → OE</li>
    </ul>
  </div>
  <div class="carousel-item">
    <h5 class="text-primary">Tuesday</h5>
    <ul class="list-group">
      <li class="list-group-item">09:00-11:30 → CD Lab (C1)</li>
      <li class="list-group-item">13:00-14:00 → PE-2</li>
      <li class="list-group-item">14:00-15:00 → EEFM</li>
    </ul>
  </div>
  <div class="carousel-item">
    <h5 class="text-primary">Wednesday</h5>
    <ul class="list-group">
      <li class="list-group-item">08:00-09:00 → PE-2</li>
      <li class="list-group-item">09:00-10:00 → EEFM</li>
      <li class="list-group-item">10:30-11:30 → PE-1</li>
      <li class="list-group-item">11:30-12:30 → PCAP</li>
      <li class="list-group-item">14:00-17:00 → WP Lab (C1)</li>
    </ul>
  </div>
  <div class="carousel-item">
    <h5 class="text-primary">Thursday</h5>
    <ul class="list-group">
      <li class="list-group-item">09:00-11:30 → PP Lab (C2)</li>
      <li class="list-group-item">13:00-14:00 → CD</li>
      <li class="list-group-item">14:00-15:00 → OE</li>
    </ul>
  </div>
  <div class="carousel-item">
    <h5 class="text-primary">Friday</h5>
    <ul class="list-group">
      <li class="list-group-item">08:00-09:00 → CD</li>
      <li class="list-group-item">09:00-10:00 → OE</li>
      <li class="list-group-item">10:30-11:30 → PE-2</li>
      <li class="list-group-item">11:30-12:30 → EEFM</li>
      <li class="list-group-item">14:00-16:30 → PP Lab (C1) + CD Lab
(C2)</li>
    </ul>
  </div>
</div>

```

```
<div class="carousel-item">
  <h5 class="text-primary">Saturday</h5>
  <ul class="list-group">
    <li class="list-group-item">08:30-11:30 → WP Lab (C2)</li>
    <li class="list-group-item">13:00-14:00 → PE-1</li>
    <li class="list-group-item">14:00-15:00 → PCAP</li>
  </ul>
</div>
</div>
<button class="carousel-control-prev" type="button" data-bs-
target="#timetableCarousel" data-bs-slide="prev">
  <span class="carousel-control-prev-icon"></span>
</button>
<button class="carousel-control-next" type="button" data-bs-
target="#timetableCarousel" data-bs-slide="next">
  <span class="carousel-control-next-icon"></span>
</button>
</div>
</div>
</div>
</div>

</body>
</html>
```

**Output:**

Bootstrap Example x Student Bio-Data Form x Employee Management x Library Dashboard x Class Timetable x +

file:///home/AVPC2/Documents/230905252/Lab3/Class-Timetable.html

### Weekly Class Timetable

#### Full Week Grid

Day	08:00-09:00	09:00-10:00	10:00-10:30	10:30-11:30	11:30-12:30	12:30-13:00	13:00-14:00	14:00-15:00	15:00-15:30	15:30-16:30
Monday	PE-1	PCAP		CD	OE					
Tuesday			CD Lab (C1)				PE-2	EEFM		
Wednesday	PE-2	EEFM		PE-1	PCAP			WP Lab (C1)		
Thursday			PP Lab (C2)				CD	OE		
Friday	CD	OE		PE-2	EEFM			PP Lab (C1) + CD Lab (C2)		
Saturday			WP Lab (C2)				PE-1	PCAP		

#### Daily View

##### Monday

08:00-09:00 → PE-1
09:00-10:00 → PCAP
10:30-11:30 → CD
11:30-12:30 → OE

EN 11:16

Bootstrap Example x Student Bio-Data Form x Employee Management x Library Dashboard x Class Timetable x +

file:///home/AVPC2/Documents/230905252/Lab3/Class-Timetable.html

### Weekly Class Timetable

#### Full Week Grid

Day	08:00-09:00	09:00-10:00	10:00-10:30	10:30-11:30	11:30-12:30	12:30-13:00	13:00-14:00	14:00-15:00	15:00-15:30	15:30-16:30
Monday	PE-1	PCAP		CD	OE					
Tuesday			CD Lab (C1)				PE-2	EEFM		
Wednesday	PE-2	EEFM		PE-1	PCAP			WP Lab (C1)		
Thursday			PP Lab (C2)				CD	OE		
Friday	CD	OE		PE-2	EEFM			PP Lab (C1) + CD Lab (C2)		
Saturday			WP Lab (C2)				PE-1	PCAP		

#### Daily View

##### Tuesday

09:00-11:30 → CD Lab (C1)
13:00-14:00 → PE-2
14:00-15:00 → EEFM

EN 11:17