Institute of Computer Technology

B. Tech. Computer Science and Engineering

Semester: IV

Sub: Front End Technologies

Course Code: 2CSE401

Practical Number:6

Objective:

To learn and implement the concept of object-oriented

programming in given project definition.

Practical Definition:

- Preform the following instruction in sample project.
    1. Insert minimum employee information.
    2. Display all employee information
    3. Modify employee information by using employee id or name.
    4. Delete employee information by using employee id or name.
    5. Sort employee record in ascending and descending order.

- Employee Input should be like:

    Emp_Id, Emp_Name, Emp_Department, Emp_Post, Salary and Contact Number.

[Note: Perform this project by using form, button, text box, checkbox, radio button, class, object, constructor]

Code :

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">
```

```html
<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Employee Management System</title>


<!-- Bootstrap CSS -->

<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css"
rel="stylesheet">


<!-- jQuery -->

<script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>


</head>
<body class="bg-light">


<div class="container mt-4">
    <h2 class="text-center text-primary">Employee Management System</h2>


    <div class="card shadow p-4 mt-3">
      <form id="employeeForm">
        <div class="row">
          <div class="col-md-4">
            <label class="form-label">Employee ID:</label>
            <input type="text" id="empId" class="form-control" required>
          </div>
          <div class="col-md-4">
            <label class="form-label">Employee Name:</label>
            <input type="text" id="empName" class="form-control" required>
          </div>
          <div class="col-md-4">
            <label class="form-label">Department:</label>
            <select id="empDept" class="form-select">
              <option>IT</option>
              <option>HR</option>
```

```
            <option>Finance</option>

            <option>Marketing</option>

          </select>

        </div>

      </div>


      <div class="row mt-3">

        <div class="col-md-4">

          <label class="form-label">Post:</label>

          <input type="text" id="empPost" class="form-control" required>

        </div>

        <div class="col-md-4">

          <label class="form-label">Salary:</label>

          <input type="number" id="empSalary" class="form-control" required>

        </div>

        <div class="col-md-4">

          <label class="form-label">Contact Number:</label>

          <input type="text" id="empContact" class="form-control" required>

        </div>

      </div>


      <button type="button" class="btn btn-primary mt-3 w-100" id="addEmployee">Add
Employee</button>

    </form>

  </div>


  <div class="mt-4">

    <h4>Employee Records</h4>


    <!-- Search Bar -->

    <input type="text" id="searchEmployee" class="form-control my-2" placeholder="Search by
Employee Name...">
```

```html
<table class="table table-bordered table-striped mt-3">
  <thead class="table-primary">
    <tr>
      <th>ID</th>
      <th>Name</th>
      <th>Department</th>
      <th>Post</th>
      <th>Salary</th>
      <th>Contact</th>
      <th>Action</th>
    </tr>
  </thead>
  <tbody id="employeeTable"></tbody>
</table>


<button class="btn btn-success" id="sortAsc">Sort A-Z</button>
<button class="btn btn-danger" id="sortDesc">Sort Z-A</button>
    </div>
  </div>

<script>
  class Employee {
    constructor(id, name, department, post, salary, contact) {
      this.id = id;
      this.name = name;
      this.department = department;
      this.post = post;
      this.salary = salary;
      this.contact = contact;
    }
```

```
      }


   let employees = [];


   function displayEmployees() {
     let tableContent = "";
     employees.forEach((emp, index) => {
       tableContent += `
         <tr>
           <td>${emp.id}</td>
           <td>${emp.name}</td>
           <td>${emp.department}</td>
           <td>${emp.post}</td>
           <td>${emp.salary}</td>
           <td>${emp.contact}</td>
           <td>
             <button class="btn btn-warning btn-sm" onclick="editEmployee(${index})">Edit</button>
             <button class="btn btn-danger btn-sm"
onclick="deleteEmployee(${index})">Delete</button>
           </td>
         </tr>
       `;
     });
     $("#employeeTable").html(tableContent);
   }


   $("#addEmployee").click(function () {
     let id = $("#empId").val().trim();
     let name = $("#empName").val().trim();
     let department = $("#empDept").val();
     let post = $("#empPost").val().trim();
     let salary = $("#empSalary").val().trim();
```

```javascript
    let contact = $("#empContact").val().trim();


    if (id && name && post && salary && contact) {

      let newEmployee = new Employee(id, name, department, post, salary, contact);

      employees.push(newEmployee);

      displayEmployees();

      $("#employeeForm")[0].reset();

    } else {

      alert("Please fill all fields!");

    }

  });


  function editEmployee(index) {

    let emp = employees[index];


    $("#empId").val(emp.id);

    $("#empName").val(emp.name);

    $("#empDept").val(emp.department);

    $("#empPost").val(emp.post);

    $("#empSalary").val(emp.salary);

    $("#empContact").val(emp.contact);


    $("#addEmployee").text("Update Employee").off("click").click(function () {

      employees[index] = new Employee(

        $("#empId").val().trim(),

        $("#empName").val().trim(),

        $("#empDept").val(),

        $("#empPost").val().trim(),

        $("#empSalary").val().trim(),

        $("#empContact").val().trim()

      );
```

```
        displayEmployees();

        $("#employeeForm")[0].reset();

        $("#addEmployee").text("Add Employee").off("click").click(addEmployee);

    });

  }


  function deleteEmployee(index) {

    if (confirm("Are you sure you want to delete this employee?")) {

      employees.splice(index, 1);

      displayEmployees();

    }

  }


  $("#sortAsc").click(function () {

    employees.sort((a, b) => a.name.localeCompare(b.name));

    displayEmployees();

  });


  $("#sortDesc").click(function () {

    employees.sort((a, b) => b.name.localeCompare(a.name));

    displayEmployees();

  });


  $("#searchEmployee").on("keyup", function () {

    let searchText = $(this).val().toLowerCase();

    $("#employeeTable tr").filter(function () {

      $(this).toggle($(this).text().toLowerCase().indexOf(searchText) > -1);

    });

  });


</script>
```

</body>

</html>

Output :-