Milestone-Assessment5

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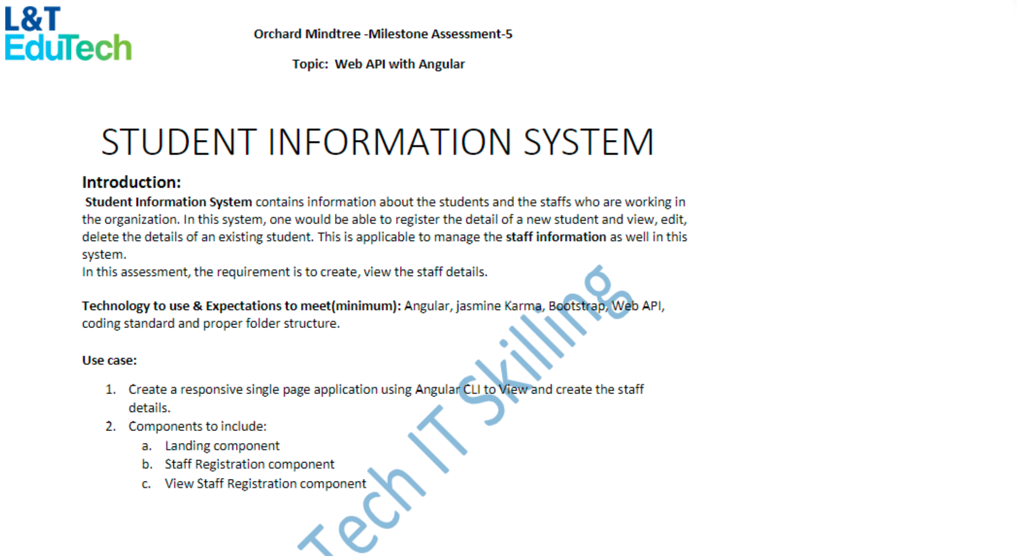
Source Code: https://github.com/BKarthik1/BKarthik1.git

Question



L&T EduTech

Orchard Mindtree -Milestone Assessment-5

Topic: Web API with Angular

STUDENT INFORMATION SYSTEM

Introduction:

Student Information System contains information about the students and the staffs who are working in the organization. In this system, one would be able to register the detail of a new student and view, edit, delete the details of an existing student. This is applicable to manage the **staff information** as well in this system.

In this assessment, the requirement is to create, view the staff details.

Technology to use & Expectations to meet(minimum): Angular, jasmine Karma, Bootstrap, Web API, coding standard and proper folder structure.

Use case:

1. Create a responsive single page application using Angular CLI to View and create the staff details.
2. Components to include:
   a. Landing component
   b. Staff Registration component
   c. View Staff Registration component

Step1

Create Database And Tables

Contains

StaffId,

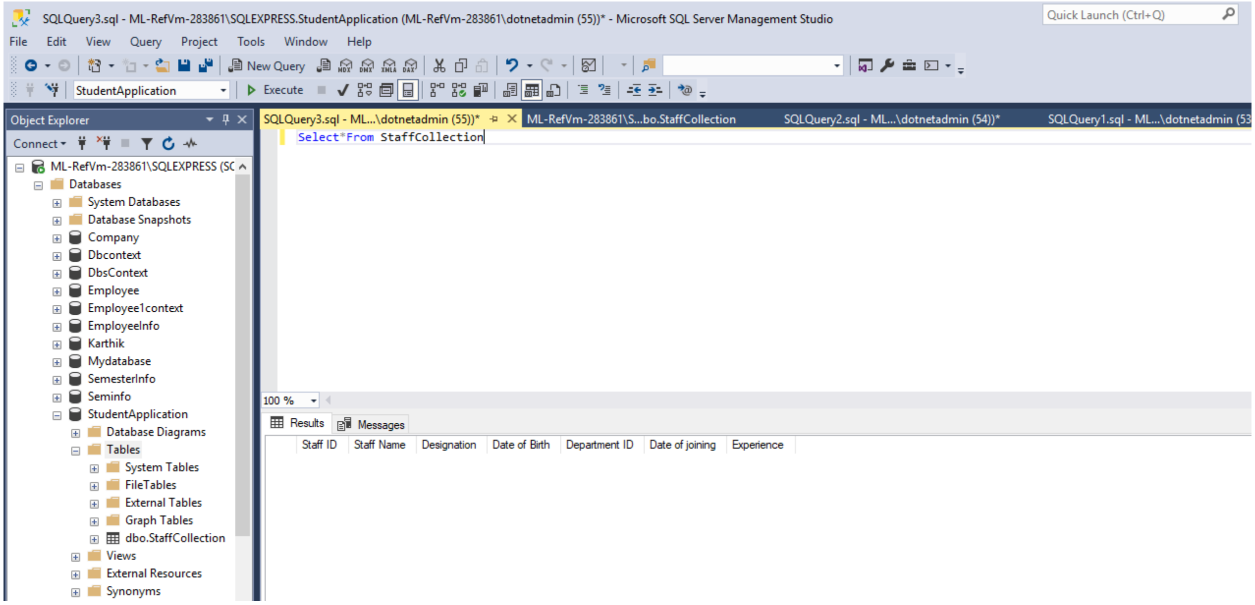
Staff Name

Designation

Date of birth

Date of joining

Department ID and Experience



```
Select*From StaffCollection
```

Staff ID	Staff Name	Designation	Date of Birth	Department ID	Date of joining	Experience

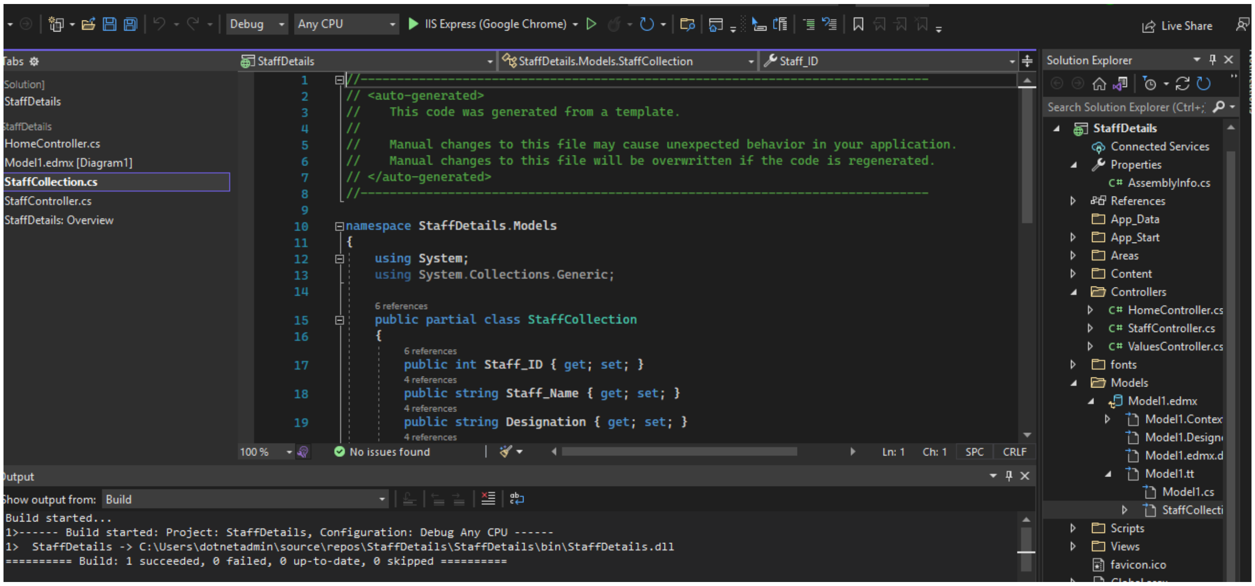
NEXT

We have to create Wep Api part in visual studio

Add Model And Connect Database

Next Create Controller

Model



```
//------------------------------------------------------------------------------
// <auto-generated>
//    This code was generated from a template.
//
//    Manual changes to this file may cause unexpected behavior in your application.
//    Manual changes to this file will be overwritten if the code is regenerated.
// </auto-generated>
//------------------------------------------------------------------------------

namespace StaffDetails.Models
{
    using System;
    using System.Collections.Generic;

    public partial class StaffCollection
    {
        public int Staff_ID { get; set; }
        public string Staff_Name { get; set; }
        public string Designation { get; set; }
```

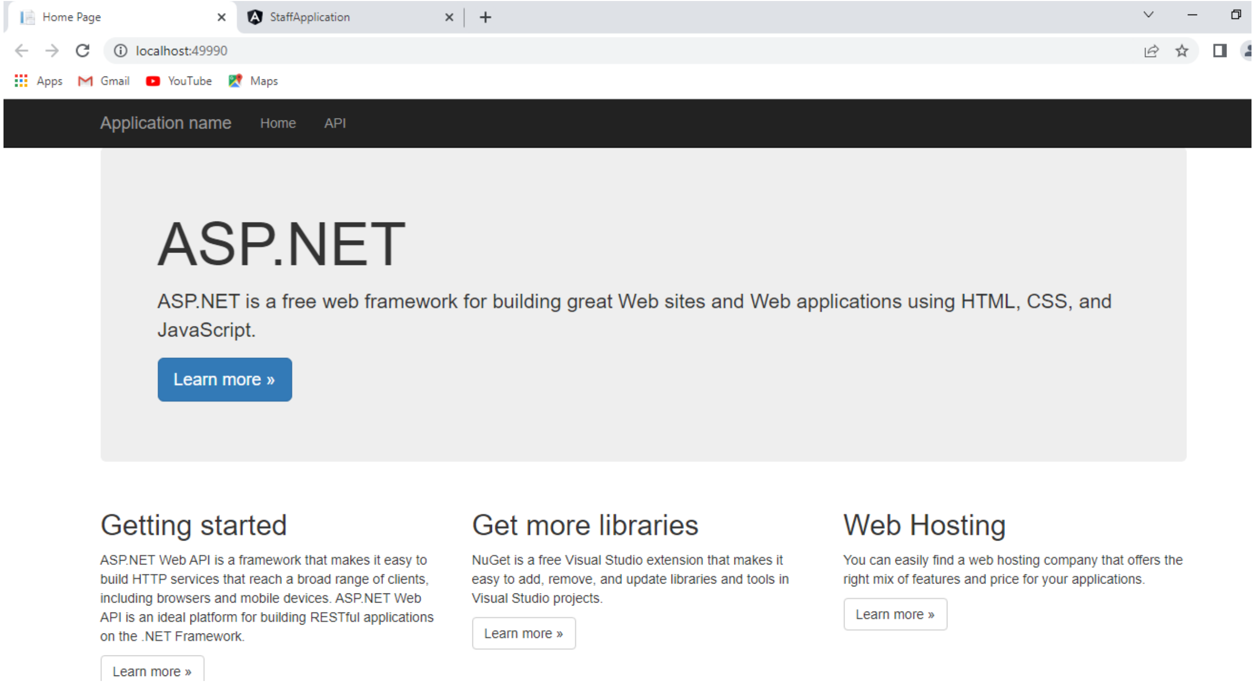
```
Build started...
1>------ Build started: Project: StaffDetails, Configuration: Debug Any CPU ------
1>  StaffDetails -> C:\Users\dotnetadmin\source\repos\StaffDetails\StaffDetails\bin\StaffDetails.dll
========== Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped ==========
```

Controller Code

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Net;
using System.Net.Http;
using System.Web.Http;
using StaffDetails.Models;



namespace StaffDetails.Controllers
{
    public class StaffController : ApiController
    {
        StudentApplicationEntities EN = new StudentApplicationEntities();
        [Route("StudentInsert")]
        [HttpPost]
        public object StudentInsert(StaffCollection objVM)
        {
            try
            {
                if (objVM.Staff_ID == 0)
                {
                    var objlm = new StaffCollection();
                    objlm.Staff_Name = objVM.Staff_Name;
                    objlm.Designation = objVM.Designation;
                    objlm.Date_of_Birth = objVM.Date_of_Birth;
                    objlm.Department_ID = objVM.Department_ID;
                    objlm.Date_of_joining = objVM.Date_of_joining;
                    objlm.Experience = objVM.Experience;


                    EN.StaffCollections.Add(objlm);
                    EN.SaveChanges();
                    return new
                    { Status = "Success", Message = "SuccessFully Saved." };
                }
                else
                {
                    var objlm = EN.StaffCollections.Where(s => s.Staff_ID ==
objVM.Staff_ID).ToList<StaffCollection>().FirstOrDefault();
                    if (objlm.Staff_ID > 0)
                    {
                        objlm.Staff_Name = objVM.Staff_Name;
                        objlm.Designation = objVM.Designation;
                        objlm.Date_of_Birth = objVM.Date_of_Birth;
                        objlm.Department_ID = objVM.Department_ID;
                        objlm.Date_of_joining = objVM.Date_of_joining;
                        objlm.Department_ID = objVM.Department_ID;

                        EN.SaveChanges();
                        return new
                        { Status = "Success", Message = "SuccessFully Update." };
                    }
                    return new
                    { Status = "Error", Message = "Invalid." };
                }
            }
            catch (Exception ex)
            {
                return new
                { Status = "Error", Message = ex.Message.ToString() };
            }
        }
        [Route("GetStudentData")]
        [HttpGet]
        public object GetStudentData()
        {
            var obj = from u in EN.StaffCollections
                      select u;
            return obj;
        }
        [Route("GetStudentById")]
        [HttpGet]
        public object GetStudentById(int Id)
        {
            return EN.StaffCollections.Where(s => s.Staff_ID ==
Id).ToList<StaffCollection>().FirstOrDefault();
        }
        [Route("DeleteStudent")]
        [HttpGet]
        public object  DeleteStudent(int Id)
        {
            try
            {
                var objlm = EN.StaffCollections.Where(s => s.Staff_ID ==
Id).ToList<StaffCollection>().FirstOrDefault();
                EN.StaffCollections.Remove(objlm);
                EN.SaveChanges();
                return new
                { Status = "Success", Message = "SuccessFully Delete." };
            }
            catch (Exception ex)
            {
                return new
                { Status = "Error", Message = ex.Message.ToString() };
            }
        }
    }
}
```

After we can check that executing or not

If it execute pages looks like below



ASP.NET

ASP.NET is a free web framework for building great Web sites and Web applications using HTML, CSS, and JavaScript.

Learn more »

Getting started

ASP.NET Web API is a framework that makes it easy to build HTTP services that reach a broad range of clients, including browsers and mobile devices. ASP.NET Web API is an ideal platform for building RESTful applications on the .NET Framework.

Learn more »

Get more libraries

NuGet is a free Visual Studio extension that makes it easy to add, remove, and update libraries and tools in Visual Studio projects.

Learn more »

Web Hosting

You can easily find a web hosting company that offers the right mix of features and price for your applications.

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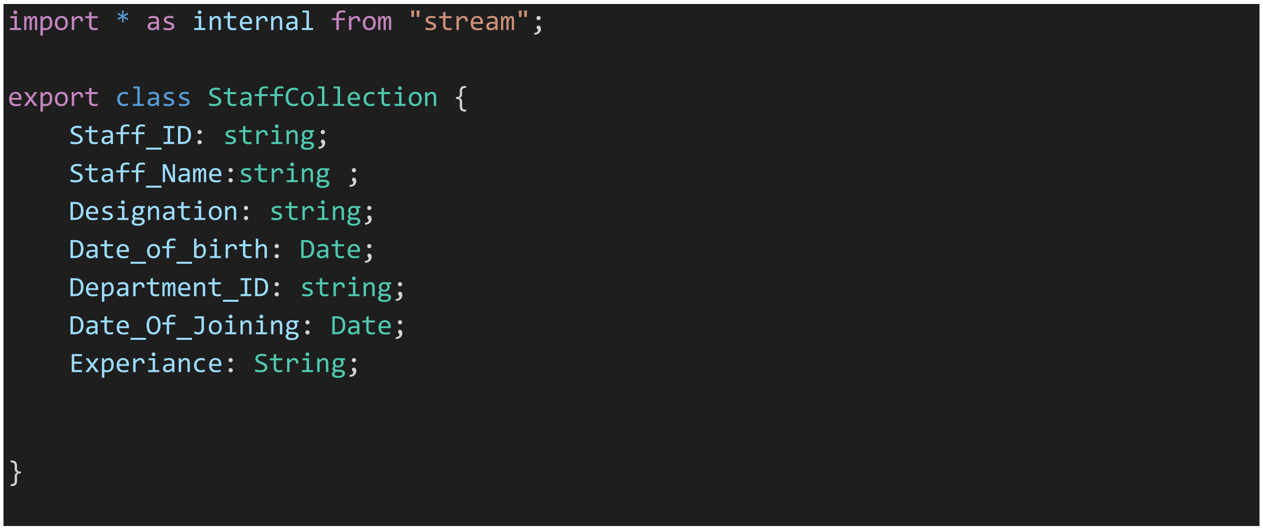
After This We have Create All Components Data in Visual Code

First

StaffCollection.ts



```
import * as internal from "stream";

export class StaffCollection {
    Staff_ID: string;
    Staff_Name:string ;
    Designation: string;
    Date_of_birth: Date;
    Department_ID: string;
    Date_Of_Joining: Date;
    Experiance: String;


}
```

Next

Creating a Class Object Of StaffCollection

StaffComponent.ts

```
import { Component, OnInit } from '@angular/core';
import { StaffCollection} from '../../Class/Staff-Collection';
import { StaffService } from '../../Service/Staff.service';
import { NgForm, FormBuilder, FormGroup, Validators, FormControl } from
'@angular/forms';
import { Observable } from 'rxjs';

@Component({
  selector: 'app-staff',
  templateUrl: './staff.component.html',
  styleUrls: ['./staff.component.css']
})
export class StaffComponent implements OnInit {

  dataSaved = false;
 massage: string | undefined;
 FromStudent: any;
 StudentId: string = "0";
 allStaff: Observable<StaffCollection[]> | undefined ;
 constructor(private formbulider: FormBuilder, private StaffService:
StaffService) {}
 GetStudent() {
  debugger;
  this.allStaff = this.StaffService.getStudent();
 }
 Reset() {
  this.FromStaff.reset();
 }
 AddStaff(StaffCollection: StaffCollection) {
  debugger;
  StaffCollection.Id = this.StudentId;
  this.StaffService.CreateStudent(StaffCollection).subscribe(
   () => {
    this.dataSaved = true;
    this.massage = 'Record saved Successfully';
    this.GetStudent();
    this.Reset();
    this.StudentId = "0";
   });
 }
 DeleteStudent(StaffId: string) {
  if (confirm("Are You Sure To Delete this Informations")) {
   this.StudentService.DeleteStudent(StudentId).subscribe(
    () => {
     this.dataSaved = true;
     this.massage = "Deleted Successfully";
     this.GetStudent();
    }
   );
  }
 }
 StudentEdit(StudentId: string) {
  debugger;
  this.StudentService.getStudentById(StudentId).subscribe((Response: { Staff_ID: 
string; Staff_Name: any; Designation: any; Date_of_Birth: any; Department_ID: 
any;  }) => {

   this.dataSaved = false;
   debugger;
   this.StudentId = Response.Staff_ID;
   this.FromStaff.controls['StaffName'].setValue(Response.Staff_Name);
   this.FromStaff.controls['Designation'].setValue(Response.Designation);
   this.FromStaff.controls['Date of Birth'].setValue(Response.Date_of_Birth);
   this.FromStaff.controls['Experience'].setValue(Response.Department_ID);
  });
 }
 ngOnInit(): void {
  this.FromStudent = this.formbulider.group({
   StaffId: ['', [Validators.required]],
   StaffName: ['', [Validators.required]],
   Designation: ['', [Validators.required]],
   Date of Joining: ['', [Validators.required]],
   Experience: ['', [Validators.required]],
  });
  this.GetStaff();
 }
```

Next

StaffService.ts

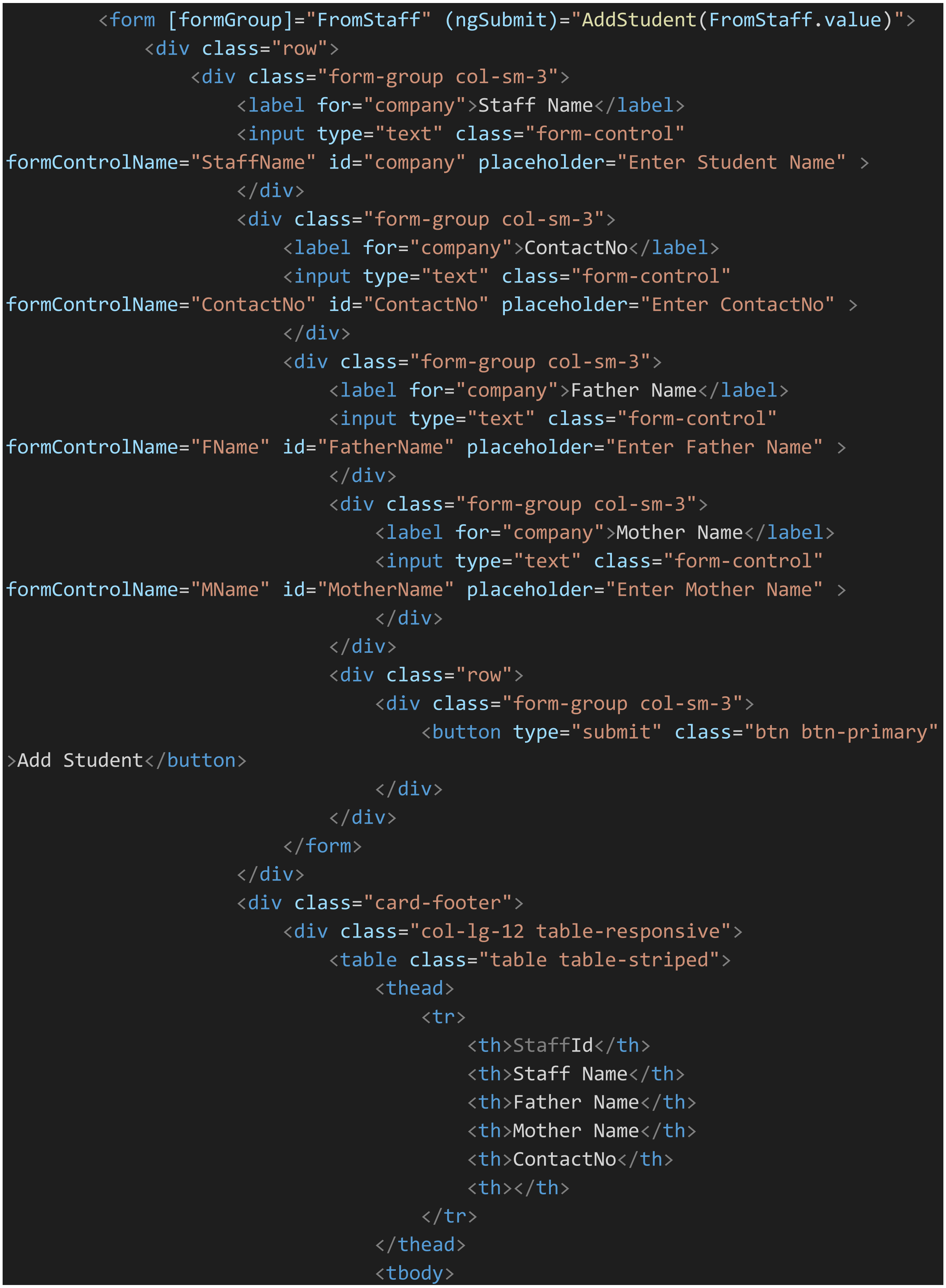
```
import { Injectable } from '@angular/core';
import {HttpClient} from '@angular/common/http';
import {HttpHeaders} from '@angular/common/http';
import { Observable } from 'rxjs';
import { StaffCollection } from '../Class/StaffCollection';
```

```
@Injectable({
  providedIn: 'root'
})
export class StaffService {

  Url = 'http://localhost:54996/Api';
  constructor(private http:HttpClient) { }
  getStaff():Observable<StaffCollection[]>
  {
    return this.http.get<StaffCollection[]>(this.Url +
'/student/GetStaffData');
  }
  CreateStaff(OutletVM:StaffCollection):Observable<StaffCollection[]>
  {
   const httpOptions = { headers: new HttpHeaders({ 'Content-Type':
'application/json' }) };
    return this.http.post<StaffCollection[]>(this.Url + '/student/StaffInsert/',
OutletVM, httpOptions)
  }
  DeleteStaff(StaffId:string):Observable<number>
  {
    return this.http.get<number>(this.Url +
'/student/DeleteStaff?Id='+StaffId);
  }
  getStudentById(StaffId: string): Observable<StaffCollection> {
    return this.http.get<StaffCollection>(this.Url + '/student/GetStaffById?Id='
+ Staff_Id);
  }
}

}
```

Next

StaffComponent.Html

```
<p>staff works!</p>
<div class="card">
    <div class="card-header" style="text-align:center">
        <b>WEL COME TO STUDENT CURD OPERATION</b>
    </div>
    <div class="card-body">
```



```
        <form [formGroup]="FromStaff" (ngSubmit)="AddStudent(FromStaff.value)">
            <div class="row">
                <div class="form-group col-sm-3">
                    <label for="company">Staff Name</label>
                    <input type="text" class="form-control"
formControlName="StaffName" id="company" placeholder="Enter Student Name" >
                    </div>
                    <div class="form-group col-sm-3">
                        <label for="company">ContactNo</label>
                        <input type="text" class="form-control"
formControlName="ContactNo" id="ContactNo" placeholder="Enter ContactNo" >
                        </div>
                        <div class="form-group col-sm-3">
                            <label for="company">Father Name</label>
                            <input type="text" class="form-control"
formControlName="FName" id="FatherName" placeholder="Enter Father Name" >
                            </div>
                            <div class="form-group col-sm-3">
                                <label for="company">Mother Name</label>
                                <input type="text" class="form-control"
formControlName="MName" id="MotherName" placeholder="Enter Mother Name" >
                                </div>
                            </div>
                            <div class="row">
                                <div class="form-group col-sm-3">
                                    <button type="submit" class="btn btn-primary"
>Add Student</button>
                                </div>
                            </div>
                        </form>
                    </div>
                    <div class="card-footer">
                        <div class="col-lg-12 table-responsive">
                            <table class="table table-striped">
                                <thead>
                                    <tr>
                                        <th>StaffId</th>
                                        <th>Staff Name</th>
                                        <th>Father Name</th>
                                        <th>Mother Name</th>
                                        <th>ContactNo</th>
                                        <th></th>
                                    </tr>
                                </thead>
                                <tbody>
```

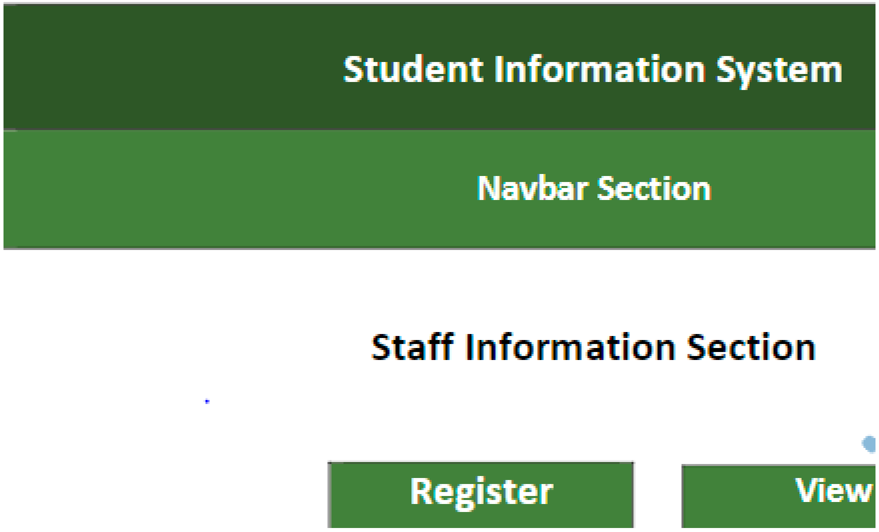
```
                                    <tr *ngFor="let Student of 
allStudent|async">
                                        <td>{{Staff.Id}}</td>
                                        <td>{{Staff.StaffName}}</td>
                                        <td>{{Staff.staffName}}</td>
                                        <td>{{Staff.StaffName}}</td>
                                        <td>{{Staff.Degnination}}</td>
                                        <td>
                                            <button type="button" class="btn btn-
primary mr-1" (click)="StaffEdit(Student.Id)">Edit</button>
                                            <button type="button" class="btn btn-
danger mr-1" (click)="DeleteStaff(Staff.Id)">Delete</button>
                                        </td>
                                    </tr>
                                </tbody>
                            </table>
                        </div>
                    </div>
                </div>
```

Next

Compile that code by

ng serve

OUTPUT



Student Information System

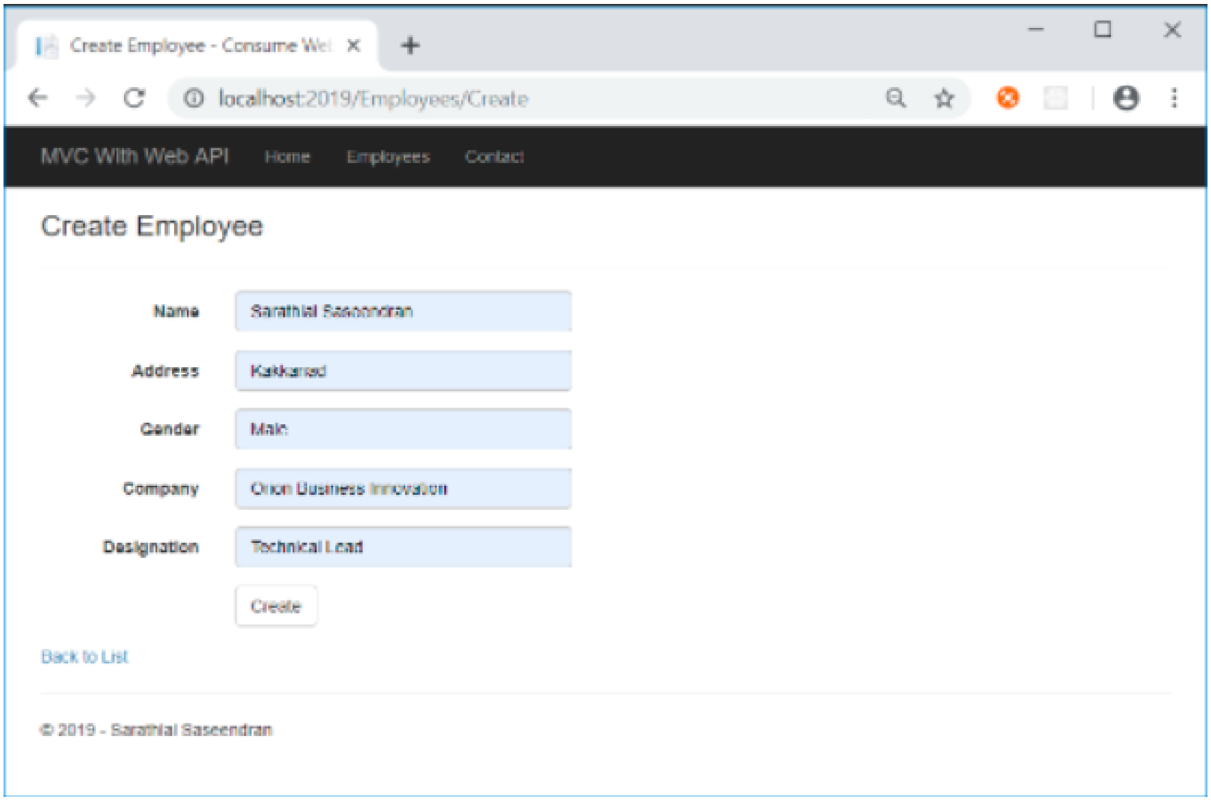
Navbar Section

Staff Information Section

Register

View

Registering


Create Employee - Consume Wel
localhost:2019/Employees/Create
MVC With Web API
Home
Employees
Contact

Create Employee

Name	Sarathlal Saseendran
Address	Kakkanad
Gender	Male
Company	Orion Business Innovation
Designation	Technical Lead

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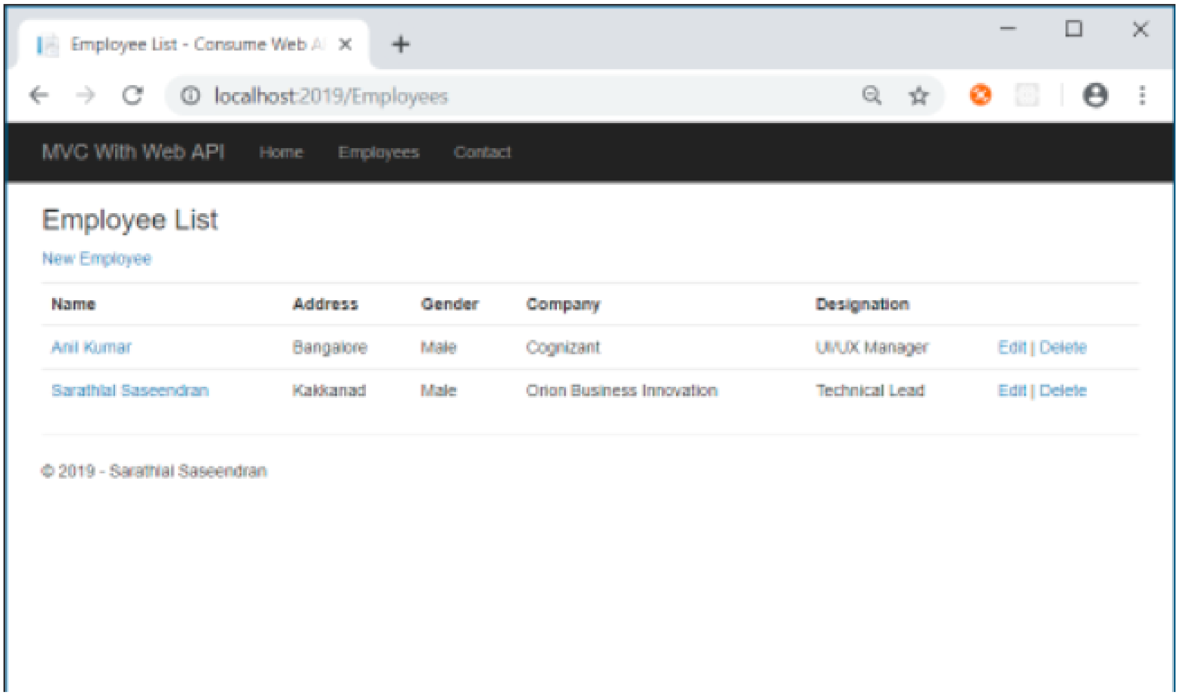
List of Staff



Employee List

New Employee

Name	Address	Gender	Company	Designation	
Anil Kumar	Bangalore	Male	Cognizant	UI/UX Manager	Edit | Delete
Sarathlal Saseendran	Kakkanad	Male	Orion Business Innovation	Technical Lead	Edit | Delete

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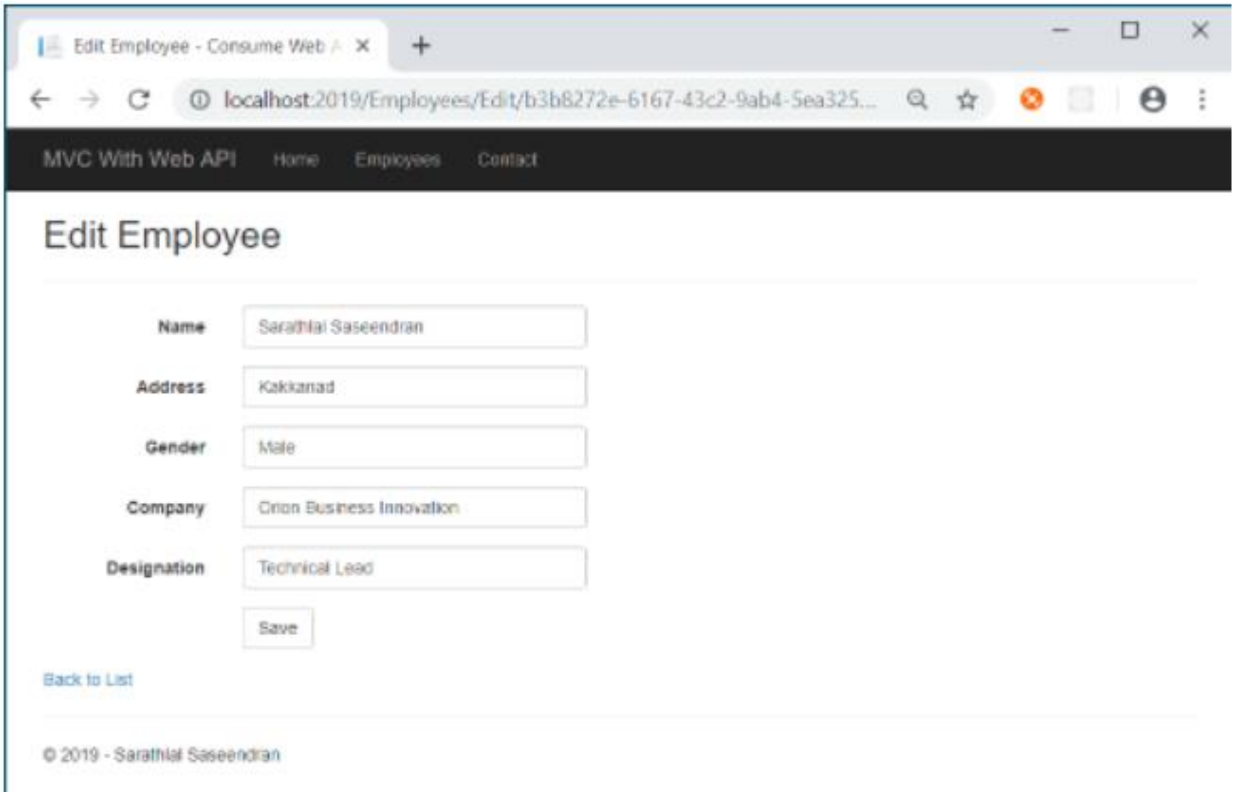
Edit


Edit Employee - Consume Web A
localhost:2019/Employees/Edit/b3b8272e-6167-43c2-9ab4-5ea325...
MVC With Web API
Home
Employees
Contact

Edit Employee

Name	Sarathlal Saseendran
Address	Kakkanad
Gender	Male
Company	Orion Business Innovation
Designation	Technical Lead

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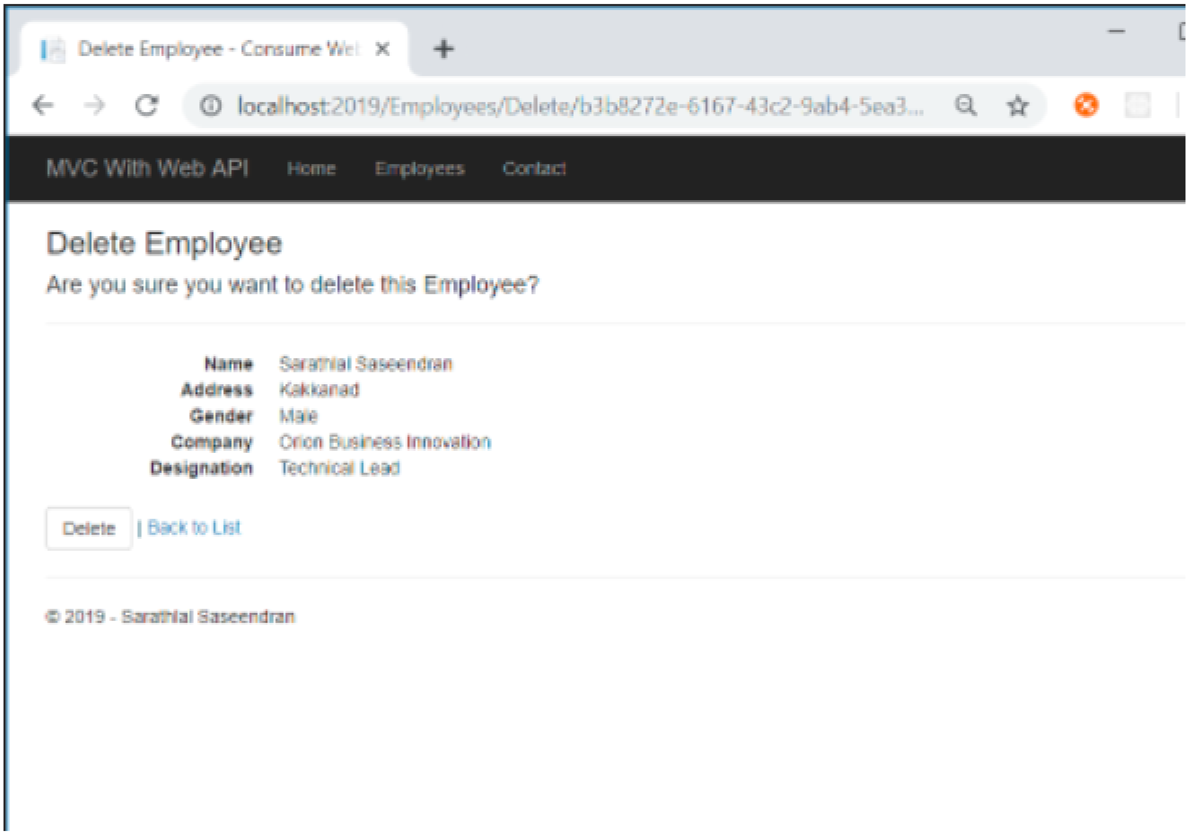
Deleting


Delete Employee - Consume Wel
localhost:2019/Employees/Delete/b3b8272e-6167-43c2-9ab4-5ea3...
MVC With Web API
Home
Employees
Contact
Delete
| Back to List

Delete Employee

Are you sure you want to delete this Employee?

Name	Sarathlal Saseendran
Address	Kakkanad
Gender	Male
Company	Orion Business Innovation
Designation	Technical Lead

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