BAL.cs:

using System;

using System.Collections.Generic;

using System.Data.Entity.Infrastructure.Interception;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using EMP\_DAL;

namespace EMP\_BAL

{

public class BAL

{

CRUDINEMS dl = null;

public BAL()

{

dl = new CRUDINEMS();

}

public bool addemployee(EmpProfile b1)

{

bool status = dl.InsertEmployee(b1);

Console.WriteLine(status);

return status;

}

public bool RemoveEmployee(int empno)

{

return dl.DeleteDept(empno);

}

public bool editemployee(int id,EmpProfile b1)

{

bool status = dl.UpdateEmployee(id,b1);

Console.WriteLine(status);

return status;

}

public List<EmpProfile> ShowEmployeeList()

{

return dl.EmployeeList();

}

public EmpProfile SearchEmployee(int id)

{

return dl.FindEmployee(id);

}

}

}

DAL Class Library

CRUDINEMS.CS

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace EMP\_DAL

{

public class CRUDINEMS

{

MyContext c1 = null;

public CRUDINEMS()

{

c1 = new MyContext();

}

public bool InsertEmployee(EmpProfile b1)

{

try

{

c1.EmpProfileTable.Add(b1);

c1.SaveChanges();

return true;

}

catch (Exception ex)

{

Console.WriteLine(ex.StackTrace);

return false;

}

}

public bool DeleteDept(int b1)

{

try

{

EmpProfile k = c1.EmpProfileTable.Find(b1);

c1.EmpProfileTable.Remove(k);

c1.SaveChanges();

return true;

}

catch (Exception ex)

{

return false;

}

}

public bool UpdateEmployee(int id, EmpProfile b1)

{

try

{

EmpProfile k = c1.EmpProfileTable.Find(id);

k.EmpName = b1.EmpName;

k.Email = b1.Email;

k.EmpCode = b1.EmpCode;

k.Email = b1.Email;

k.DeptCode = b1.DeptCode;

c1.SaveChanges();

return true;

}

catch (Exception ex)

{

Console.WriteLine(ex.StackTrace);

return false;

}

}

public List<EmpProfile> EmployeeList()

{

return c1.EmpProfileTable.ToList();

}

public EmpProfile FindEmployee(int id)

{

EmpProfile k = c1.EmpProfileTable.Find(id);

return k;

}

}

}

DeptMaster.cs

using System;

using System.Collections.Generic;

using System.ComponentModel.DataAnnotations;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace EMP\_DAL

{

public class DeptMaster

{

[Key]

[Required()]

public int DeptCode { get; set; }

public string DeptName { get; set; }

public virtual ICollection<EmpProfile> EmpProfiles { get; set; }

}

}

EmpProfile.cs

using System;

using System.Collections.Generic;

using System.ComponentModel.DataAnnotations;

using System.ComponentModel.DataAnnotations.Schema;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace EMP\_DAL

{

public class EmpProfile

{

[Key]

public int EmpCode { get; set; }

public DateTime DateOfBirth { get; set; }

public string EmpName { get; set; }

public string Email { get; set; }

public int DeptCode { get; set; }

[ForeignKey("DeptCode")]

public virtual DeptMaster DeptMaster { get; set; }

}

}

MyContext.cs:

using System;

using System.Collections.Generic;

using System.Data.Entity;

using System.Linq;

using System.Runtime.Remoting.Contexts;

using System.Text;

using System.Threading.Tasks;

namespace EMP\_DAL

{

public class MyContext : DbContext

{

//public MyContext() : base("Context1")

//{

// //createdatabase if not exists

// //drop create always

// //drop create if model changes

// Database.SetInitializer<MyContext>(new DropCreateDatabaseAlways<MyContext>());

//}

public virtual DbSet<DeptMaster> DeptMasterTable { get; set; }

public virtual DbSet<EmpProfile> EmpProfileTable { get; set; }

}

public class DeptMasterDbInitializer : DropCreateDatabaseIfModelChanges<MyContext>

{

protected override void Seed(MyContext context)

{

var depts = new List<DeptMaster> {

new DeptMaster { DeptCode = 1, DeptName = "IT"},

new DeptMaster { DeptCode = 2, DeptName = "ECE" },

new DeptMaster { DeptCode = 3, DeptName = "CSE" },

};

depts.ForEach(s => context.DeptMasterTable.Add(s));

context.SaveChanges();

}

}

}

APP.Config:

<connectionStrings>

<add connectionString="Data Source=LAPTOP-04NNP7B7\SQLEXPRESS;Initial Catalog = EMSnew;Integrated Security= True" name ="MyContext" providerName ="System.Data.SqlClient"></add>

</connectionStrings>

In WEBAPI

EMSProperty.cs – Model Class

using System;

using System.Collections.Generic;

using System.ComponentModel.DataAnnotations;

using System.Linq;

using System.Web;

namespace EMSWEBAPI.Models

{

public class EMSProperty

{

public int DeptCode { get; set; }

[Required()]

public int EmpCode { get; set; }

public DateTime DateOfBirth { get; set; }

public string EmpName { get; set; }

public string Email { get; set; }

}

}

EMSController.cs

using EMP\_BAL;

using EMP\_DAL;

using EMSWEBAPI.Models;

using System;

using System.Collections.Generic;

using System.Linq;

using System.Net;

using System.Net.Http;

using System.Runtime.Remoting.Messaging;

using System.Web.Http;

namespace EMSWEBAPI.Controllers

{

public class EMSController : ApiController

{

BAL be = null;

public EMSController()

{

be = new BAL();

}

// GET api/<controller>

[Route("Getallemps")]

public List<EMSProperty> Get()

{

List<EMSProperty> profiles = new List<EMSProperty>();

List<EmpProfile> empbal = new List<EmpProfile>();

empbal = be.ShowEmployeeList();

foreach (var item in empbal)

{

//Employees emp = new Employees();

profiles.Add(new EMSProperty { EmpCode = item.EmpCode, EmpName = item.EmpName, Email = item.Email, DateOfBirth = item.DateOfBirth, DeptCode = item.DeptCode });

}

return profiles;

}

[Route("GetEmpbyid/{id}")]

// GET api/<controller>/5

public EMSProperty Get(int id)

{

EmpProfile p = be.SearchEmployee(id);

EMSProperty k = new EMSProperty();

k.EmpCode = p.EmpCode;

k.EmpName = p.EmpName;

k.DateOfBirth = p.DateOfBirth;

k.Email=p.Email;

k.DeptCode = p.DeptCode;

return k;

}

[Route("AddEmps")]

// POST api/<controller>

public HttpResponseMessage Post([FromBody] EMSProperty p1)

{

EmpProfile hy = new EmpProfile();

hy.EmpCode = p1.EmpCode;

hy.DateOfBirth= Convert.ToDateTime(p1.DateOfBirth);

hy.Email = p1.Email;

hy.EmpName = p1.EmpName;

hy.DeptCode = p1.DeptCode;

bool ans = be.addemployee(hy);

if (ans)

{

return Request.CreateResponse(HttpStatusCode.OK);

}

else

{

return Request.CreateResponse(HttpStatusCode.NotAcceptable);

}

}

[Route("UpdateEmps/{id}")]

// PUT api/<controller>/5

public HttpResponseMessage Put(int id, [FromBody] EMSProperty p1)

{

EmpProfile hy1 = new EmpProfile();

hy1.EmpCode = p1.EmpCode;

hy1.DateOfBirth = Convert.ToDateTime(p1.DateOfBirth);

hy1.Email = p1.Email;

hy1.EmpName = p1.EmpName;

hy1.DeptCode = p1.DeptCode;

bool ans = be.editemployee(id,hy1);

if (ans)

{

return Request.CreateResponse(HttpStatusCode.OK);

}

else

{

return Request.CreateResponse(HttpStatusCode.NotAcceptable);

}

}

[Route("DeleteEmps/{id}")]

// DELETE api/<controller>/5

public HttpResponseMessage Delete(int id)

{

bool ans = be.RemoveEmployee(id);

if (ans)

{

return Request.CreateResponse(HttpStatusCode.OK);

}

else

{

return Request.CreateResponse(HttpStatusCode.NotAcceptable);

}

}

}

}

Web.config:

<connectionStrings>

<add connectionString="Data Source=LAPTOP-04NNP7B7\SQLEXPRESS;Initial Catalog = EMSnew;Integrated Security= True" name="MyContext" providerName="System.Data.SqlClient">

</add>

</connectionStrings>

Global.aspx.cs:

using EMP\_DAL;

using System;

using System.Collections.Generic;

using System.Linq;

using System.Web;

using System.Web.Http;

using System.Web.Mvc;

using System.Web.Optimization;

using System.Web.Routing;

namespace EMSWEBAPI

{

public class WebApiApplication : System.Web.HttpApplication

{

protected void Application\_Start()

{

System.Data.Entity.Database.SetInitializer(new DeptMasterDbInitializer());

}

}

}