# Source Code:

# RainBowSchool.cs:

namespace RainbowSchoolApi.Model

{

public class RainbowSchool

{

public int Id { get; set; }

public string StudentName { get; set; }

public string Subject { get; set; }

public double SubjectMarks { get; set; }

}

}

# RainbowController.cs:

using System;

using System.Collections.Generic;

using System.Linq;

using System.Threading.Tasks;

using Microsoft.AspNetCore.Http;

using Microsoft.AspNetCore.Mvc;

using Microsoft.EntityFrameworkCore;

using RainbowSchoolApi.Data;

using RainbowSchoolApi.Model;

namespace RainbowSchoolApi.Controllers

{

[Route("api/[controller]")]

[ApiController]

public class RainbowSchoolsController : ControllerBase

{

private readonly DataDbContext \_context;

public RainbowSchoolsController(DataDbContext context)

{

\_context = context;

}

// GET: api/RainbowSchools

[HttpGet]

public async Task<ActionResult<IEnumerable<RainbowSchool>>> GetRainbowSchool()

{

if (\_context.RainbowSchool == null)

{

return NotFound();

}

return await \_context.RainbowSchool.ToListAsync();

}

// GET: api/RainbowSchools/5

[HttpGet("{id}")]

public async Task<ActionResult<RainbowSchool>> GetRainbowSchool(int id)

{

if (\_context.RainbowSchool == null)

{

return NotFound();

}

var rainbowSchool = await \_context.RainbowSchool.FindAsync(id);

if (rainbowSchool == null)

{

return NotFound();

}

return rainbowSchool;

}

// PUT: api/RainbowSchools/5

// To protect from overposting attacks, see https://go.microsoft.com/fwlink/?linkid=2123754

[HttpPut("{id}")]

public async Task<IActionResult> PutRainbowSchool(int id, RainbowSchool rainbowSchool)

{

if (id != rainbowSchool.Id)

{

return BadRequest();

}

\_context.Entry(rainbowSchool).State = EntityState.Modified;

try

{

await \_context.SaveChangesAsync();

}

catch (DbUpdateConcurrencyException)

{

if (!RainbowSchoolExists(id))

{

return NotFound();

}

else

{

throw;

}

}

return NoContent();

}

// POST: api/RainbowSchools

// To protect from overposting attacks, see https://go.microsoft.com/fwlink/?linkid=2123754

[HttpPost]

public async Task<ActionResult<RainbowSchool>> PostRainbowSchool(RainbowSchool rainbowSchool)

{

if (\_context.RainbowSchool == null)

{

return Problem("Entity set 'DataDbContext.RainbowSchool' is null.");

}

\_context.RainbowSchool.Add(rainbowSchool);

await \_context.SaveChangesAsync();

return CreatedAtAction("GetRainbowSchool", new { id = rainbowSchool.Id }, rainbowSchool);

}

// DELETE: api/RainbowSchools/5

[HttpDelete("{id}")]

public async Task<IActionResult> DeleteRainbowSchool(int id)

{

if (\_context.RainbowSchool == null)

{

return NotFound();

}

var rainbowSchool = await \_context.RainbowSchool.FindAsync(id);

if (rainbowSchool == null)

{

return NotFound();

}

\_context.RainbowSchool.Remove(rainbowSchool);

await \_context.SaveChangesAsync();

return NoContent();

}

private bool RainbowSchoolExists(int id)

{

return (\_context.RainbowSchool?.Any(e => e.Id == id)).GetValueOrDefault();

}

}

}

# Appsetting.Json:

{

"Logging": {

"LogLevel": {

"Default": "Information",

"Microsoft.AspNetCore": "Warning"

}

},

"AllowedHosts": "\*",

"ConnectionStrings": {

"SchoolAppDbContext": "Server=DESKTOP-

5 SCOQE5;Database=Project4Db;Trusted\_Connection=True;TrustServerCertificate=true;M ultipleActiveResultSets=true"

} }

Program.cs:

using Microsoft.EntityFrameworkCore; using Microsoft.Extensions.DependencyInjection; using SchoolApp.Data;

var builder = WebApplication.CreateBuilder(args);

builder.Services.AddDbContext<SchoolAppDbContext>(options =>

options.UseSqlServer(builder.Configuration.GetConnectionString("SchoolAppDbContex

t") ?? throw new InvalidOperationException("Connection string

'SchoolAppDbContext' not found.")));

// Add services to the container.

builder.Services.AddControllers();

// Learn more about configuring Swagger/OpenAPI at https://aka.ms/aspnetcore/swashbuckle builder.Services.AddEndpointsApiExplorer(); builder.Services.AddSwaggerGen();

var app = builder.Build();

// Configure the HTTP request pipeline. if (app.Environment.IsDevelopment())

{ app.UseSwagger(); app.UseSwaggerUI();

}

app.UseAuthorization();

app.MapControllers();

app.Run();

**Appsetting.Json:**

{

"Logging": {

"LogLevel": {

"Default": "Information",

"Microsoft.AspNetCore": "Warning"

}

},

"AllowedHosts": "\*",

"ConnectionStrings": {

"DataDbContext": "Server=CHARAN-PC;Database=RainbowSchoolData;Trusted\_Connection=True;TrustServerCertificate=True;MultipleActiveResultSets=true"

}

}