Controller

```csharp
using Microsoft.AspNetCore.Mvc;
using PetApi.Data;
using PetApi.Models;
using Microsoft.EntityFrameworkCore;

namespace PetApi.Controllers
{
    [Route("api/[controller]")]
    [ApiController]
    public class DogsController : ControllerBase
    {
        private readonly PetDbContext _context;

        public DogsController(PetDbContext context)
        {
            _context = context;
        }

        [HttpGet("GetAllDogs")]
        public async Task<ActionResult<IEnumerable<Dog>>> GetDogs()
        {
            return await _context.Dogs.ToListAsync();
        }

        [HttpGet("GetById")]
        public async Task<ActionResult<Dog>> GetDogById(int id)
        {
            var dog = await _context.Dogs.FindAsync(id);

            if (dog == null)
                return NotFound($"Dog with Id {id} not found.");

            return Ok(dog);
        }

        [HttpGet("GetByName")]
```

```csharp
        public async Task<ActionResult<IEnumerable<Dog>>>
GetDogByName(string name)
        {
            var dogs = await _context.Dogs
                .Where(d => d.Breed.ToLower().Contains(name.ToLower()))
                .ToListAsync();

            if (dogs == null || dogs.Count == 0)
                return NotFound($"No dogs found with name containing
'{name}'.");

            return Ok(dogs);
        }


        [HttpPost("AddDog")]
        public async Task<ActionResult<Dog>> AddDog(Dog dog)
        {
            _context.Dogs.Add(dog);
            await _context.SaveChangesAsync();
            return CreatedAtAction(nameof(GetDogById), new { id = dog.Id
}, dog);
        }


        [HttpPut("EditDog")]
        public async Task<IActionResult> UpdateDog(int id, Dog dog)
        {
            if (id != dog.Id)
                return BadRequest("Dog ID mismatch.");

            var existingDog = await _context.Dogs.FindAsync(id);
            if (existingDog == null)
                return NotFound($"Dog with Id {id} not found.");

            existingDog.Breed = dog.Breed;
            existingDog.Origin = dog.Origin;

            await _context.SaveChangesAsync();
            return Ok(existingDog);
        }
```

```
        [HttpDelete("DeleteById")]
        public async Task<IActionResult> DeleteDog(int id)
        {
            var dog = await _context.Dogs.FindAsync(id);
            if (dog == null)
                return NotFound($"Dog with Id {id} not found.");

            _context.Dogs.Remove(dog);
            await _context.SaveChangesAsync();
            return Ok($"Dog with Id {id} deleted.");
        }
    }
}
```

DbContext

```
using Microsoft.EntityFrameworkCore;
using PetApi.Models;

namespace PetApi.Data
{
    public class PetDbContext : DbContext
    {
        public PetDbContext(DbContextOptions<PetDbContext> options) :
base(options) { }

        public DbSet<Dog> Dogs { get; set; }
    }
}
```

Model

```csharp
namespace PetApi.Models
{
    public class Dog
    {
        public int Id { get; set; }
        public string Breed { get; set; } = string.Empty;
        public string Origin { get; set; } = string.Empty;
    }
}
```

Program.cs

```csharp
using Microsoft.EntityFrameworkCore;
using PetApi.Data;
using Microsoft.OpenApi.Models;

var builder = WebApplication.CreateBuilder(args);
builder.Services.AddControllers();
builder.Services.AddEndpointsApiExplorer();
builder.Services.AddSwaggerGen();
builder.Services.AddOpenApi();
builder.Services.AddDbContext<PetDbContext>(options =>

options.UseSqlServer(builder.Configuration.GetConnectionString("DefaultCon
nection")));
var app = builder.Build();

if (app.Environment.IsDevelopment())
{
 app.UseSwagger();
 app.UseSwaggerUI();
}
app.UseHttpsRedirection();
app.MapControllers();

app.Run();
```

ScreenShots

PetApi 1.0 OAS 3.0

http://localhost:5071/swagger/v1/swagger.json

Dogs ^

GET	/api/Dogs/GetAllDogs	∨
GET	/api/Dogs/GetById	∨
GET	/api/Dogs/GetByName	∨
POST	/api/Dogs/AddDog	∨
PUT	/api/Dogs/EditDog	∨
DELETE	/api/Dogs/DeleteById	∨

Request URL

```
http://localhost:5071/api/Dogs/GetAllDogs
```

Server response

| Code | Details |

200

Response body

```json
[
  {
    "id": 1,
    "breed": "Retriever",
    "origin": "Golden"
  },
  {
    "id": 2,
    "breed": "Bulldog",
    "origin": "French"
  },
  {
    "id": 3,
    "breed": "Retriever",
    "origin": "Labrador"
  },
  {
    "id": 4,
    "breed": "German",
    "origin": "Shepherd"
  },
  {
    "id": 5,
    "breed": "Boston",
    "origin": "Terrier"
  },
  {
    "id": 6,
```

Request URL

```
http://localhost:5071/api/Dogs/GetById?id=1
```

Server response

| Code | Details |

200

Response body

```json
{
  "id": 1,
  "breed": "Retriever",
  "origin": "Golden"
}
```

Request URL

```
http://localhost:5071/api/Dogs/GetByName?name=Retriever
```

Server response

Code	Details
200	**Response body**

```json
[
  {
    "id": 1,
    "breed": "Retriever",
    "origin": "Golden"
  },
  {
    "id": 3,
    "breed": "Retriever",
    "origin": "Labrador"
  }
]
```

Request URL

```
http://localhost:5071/api/Dogs/AddDog
```

Server response

Code	Details
201 *Undocumented*	**Response body**

```json
{
  "id": 7,
  "breed": "Border",
  "origin": "Coolie"
}
```

Request URL

```
http://localhost:5071/api/Dogs/EditDog?id=7
```

Server response

Code	Details
200	**Response body**

```json
{
  "id": 7,
  "breed": "Borders",
  "origin": "Coolie"
}
```

Request URL

```
http://localhost:5071/api/Dogs/DeleteById?id=6
```

Server response

Code	Details
200	**Response body**

```
Dog with Id 6 deleted.
```