

## Part1: update

System.InvalidOperationException: The instance of entity type 'Category' cannot be tracked

```
[HttpPut("{id}")]

0 references
public IActionResult Update([FromRoute]int id,[FromBody]Category category)
{
    var categoryInDb = _context.Categories.AsNoTracking().FirstOrDefault(C => C.Id == id)
    if (categoryInDb == null) return NotFound();

    category.Id = categoryInDb.Id;
    _context.Categories.Update(category);
    _context.SaveChanges();

    return NoContent();
}
```

## Part2:service layer

Controller =>

يستم request ويرسل response

Service => logic هي تعمل

```
1  using System.Linq.Expressions;
2  using TShop.API.Models;
3
4  namespace TShop.API.Services
5  {
6      1 reference
7      public interface ICategoryService
8      {
9          0 references
10         IEnumerable<Category> GetAll();
11         0 references
12         Category Get(Expression <Func<Category, bool>> expression);
13         0 references
14         Category Add(Category category);
15         0 references
16         bool Edit(int id, Category category);
17         0 references
18         bool Remove(int id);
19     }
20 }
```

## Primary constructor

```
CategoryService.cs | d2ix1qi5...sql | 2025031720552...ateCategory.cs | CategoriesController.cs* | ApplicationDbContext.cs | TShop.API.csproj | Program.cs | appsettings.json | Category.cs | <<
TShop.API.Controllers.CategoriesController
namespace TShop.API.Controllers
{
    [Route("api/[controller]")]
    [ApiController]
    0 references
    public class CategoriesController(ICategoryService categoryService) : ControllerBase
    {
        private readonly ICategoryService categoryService = categoryService;

        [HttpGet("")]
        0 references
        public IActionResult getAll()
        {
            var categories = categoryService.GetAll();
            return Ok(categories);
        }
    }
}
```

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