

Pastikan Anda menginstal paket yang diperlukan seperti Microsoft.EntityFrameworkCore.SqlServer dan Microsoft.EntityFrameworkCore.Tools.

Buka terminal dan jalankan perintah berikut untuk menginstal paket yang diperlukan:

```
dotnet add package Microsoft.EntityFrameworkCore.SqlServer
```

```
dotnet add package Microsoft.EntityFrameworkCore.Tools
```

## **2.2. Buat Model dan DbContext**

Buat model untuk produk dan DbContext untuk menghubungkan aplikasi ke database.

Product.cs (Model):

```
public class Product
{
    public int Id { get; set; }
    public string Name { get; set; }
    public decimal Price { get; set; }
    public int Quantity { get; set; }
}
```

**ApplicationDbContext.cs (DbContext):**

```
using Microsoft.EntityFrameworkCore;
```

```
public class ApplicationDbContext : DbContext
{
    public ApplicationDbContext(DbContextOptions<ApplicationDbContext> options) :
    base(options) { }

    // DbSet untuk produk
    public DbSet<Product> Products { get; set; }
}
```

## **2.3. Konfigurasi Koneksi Database di Program.cs**

Tambahkan koneksi ke SQL Server di Program.cs.

```
var builder = WebApplication.CreateBuilder(args);
```

```
// Add services to the container.
```

```
builder.Services.AddDbContext<ApplicationDbContext>(options =>
```

```
    options.UseSqlServer(builder.Configuration.GetConnectionString("DefaultConnection")));
```

```
builder.Services.AddControllers();
```

```
builder.Services.AddCors(options =>
```

```
{
```

```
    options.AddPolicy("AllowAngularApp", policy =>
```

```
        policy.WithOrigins("http://localhost:4200") // URL Angular Anda
```

```
            .AllowAnyMethod()
```

```
            .AllowAnyHeader());
```

```
});
```

```
var app = builder.Build();
```

```
// Enable CORS
```

```
app.UseCors("AllowAngularApp");
```

```
app.MapControllers();
```

```
app.Run();
```

## 2.4. Tambahkan Connection String di appsettings.json

Tambahkan connection string di appsettings.json untuk menghubungkan aplikasi dengan SQL Server.

```
{
```

```
    "ConnectionStrings": {
```

```

    "DefaultConnection":
    "Server=localhost;Database=InventoryDB;Trusted_Connection=True;"
  }
}

```

## 2.5. Buat Controller untuk Mengakses Stored Procedure

Buat controller untuk mengakses **Stored Procedure** dan menampilkan data produk.

### ProductsController.cs:

```

using Microsoft.AspNetCore.Mvc;
using Microsoft.EntityFrameworkCore;
using System.Data.SqlClient;

[Route("api/[controller]")]
[ApiController]
public class ProductsController : ControllerBase
{
    private readonly ApplicationDbContext _context;

    public ProductsController(ApplicationDbContext context)
    {
        _context = context;
    }

    // GET: api/products
    [HttpGet]
    public async Task<ActionResult> GetAllProducts()
    {
        var products = await _context.Products.FromSqlRaw("EXEC GetAllProducts").ToListAsync();
        return Ok(products);
    }
}

```

### 3. Buat Frontend dengan Angular 18

#### 3.1. Buat Proyek Angular

Jika Anda belum memiliki proyek Angular, buatlah proyek baru dengan perintah berikut:

```
ng new angular-app  
cd angular-app  
ng serve
```

#### 3.2. Buat Service di Angular untuk Mengakses API

Di dalam proyek Angular, buat service untuk berkomunikasi dengan API ASP.NET Core.

**api.service.ts:**

```
import { Injectable } from '@angular/core';  
import { HttpClient } from '@angular/common/http';  
import { Observable } from 'rxjs';  
  
@Injectable({  
  providedIn: 'root'  
})  
export class ApiService {  
  private apiUrl = 'http://localhost:5000/api/products'; // URL API ASP.NET Core  
  
  constructor(private http: HttpClient) { }  
  
  getProducts(): Observable<any> {  
    return this.http.get<any>(this.apiUrl);  
  }  
}
```

#### 3.3. Tampilkan Data di Komponen Angular

Di dalam komponen Angular, panggil service untuk mengambil data dari API dan tampilkan data produk.

#### **app.component.ts:**

```
import { Component, OnInit } from '@angular/core';
import { ApiService } from './api.service';
```

```
@Component({
  selector: 'app-root',
  templateUrl: './app.component.html',
  styleUrls: ['./app.component.css']
})
export class AppComponent implements OnInit {
  products: any[] = [];

  constructor(private apiService: ApiService) {}

  ngOnInit() {
    this.apiService.getProducts().subscribe(data => {
      this.products = data;
    });
  }
}
```

#### **app.component.html:**

```
<div>
  <h1>List of Products</h1>
  <ul>
    <li *ngFor="let product of products">
      {{ product.name }} - ${{ product.price }} (Stock: {{ product.quantity }})
    </li>
  </ul>
</div>
```

### **3.4. Pastikan HttpClientModule Terinstal**

Pastikan Anda mengimpor HttpClientModule di app.module.ts untuk mendukung HTTP requests.

**app.module.ts:**

```
import { HttpClientModule } from '@angular/common/http';
```

```
@NgModule({  
  declarations: [AppComponent],  
  imports: [HttpClientModule],  
  bootstrap: [AppComponent]  
})  
export class AppModule {}
```