Follow Udemy <https://www.udemy.com/course/build-rest-apis-with-aspnet-core-web-api-entity-framework/learn/lecture/29933586#overview>

Database connection string for my system SSMS: **Server=localhost;Database=master;Trusted\_Connection=True;**

1. create solution .net core web api project using .net frame work 6

2.create model folder and in this create domain folder and in this create domain objects

3. Install two packedges

**INSTALL ENTITY FRAMEWORK CORE NUGET PACKAGES**

* Microsoft.Entityframeworkcore.SqlServer
* Microsoft.Entityframeworkcore.Tools

4. Create a folder Data and in this create file for dbcontext(NZwalksdbcontext)

5. create connection string in app setting.json file

6. Inject dbcontext(NZwalksdbcontext) in services collection for this go to progarm.cs file and inject db context (before builder)

7. Run migration script in packedge manager console

* Add-Migration
* Update-Database

8.Seed data in dababase

9. create new controller (select controller form add)

10. Create Regios repository

11.implement Repository class

12. In Repository class Create ctor in the class and fetch the database so use dbcontext which declear in program.cs like NZwalksDBcontext

13. Add interface and its implemenatation in service using dependency injection in program.cs file

14.Then implement in regions controller (now we can get data from database)

15. For getALL create DTO in Models (if some changes (client for current version api not hve to make changes its bad practice))

16.Install using automapper to map DTOs

17.In manage nuget packedes

* Automapper
* Automapper.Extensions.Microsoft.DependencyInjection

18. create profile for Mapper create folder profile and create class

19.Now inject in program.cs add after repositiry (by using this all profile will be map using assembly not do this again an d again)

20. now create a private filed in cotroller in mapper

21. Test The API

22.For Authentication(correct user) and Authorization(Correct Role) setting up and install

* Microsoft.AspNetCore.Authentication.JwtBearer (Install older version for .net 6.0)
* Microsoft.IdentityModel.Tokens
* System.IdentityModel.Tokens.Jwt

23. in appsetting.json add jwt (random and unique key)

24. right click on NZWalks.API and select properties and go to debug and open debug launch profile UI and drop down and in app url select first [https://localhost:7296](https://localhost:7296/) and use this in jwt token in issurance and audiance in appsetting.json file

25. Now go to program.cs and and enject before builder.build add authentcation here

26. add use authentication before use authorization in program.cs file

27. Create Users table on database for this use the old setps.(User, UserRole, Roles)

28.Add context in data context and run migration and seed the data

29.create repostitory and inject in program.cs and create empty auth controller

28.In repository return user after checking user role

29. In auth controller create empty login method

30.Create ITokenHandler and its implementation which basically create token on the basis of user role and inject in program.cs and its retun the token and use in authcontroller (create dto for loginRequest)

31.Now in region controller Role can be directly use in API controller by the name must be same (use Authorization by using role you can use simple authorization at the top of the file which authorize all the api or also make some api public as well)

32. Now setupswagger or use berrer token in post man (add authentication in swagger)

33. in program.cs add in builder.service.addswaggergen()

34.test all apis (Error: response status is 403 (unauthorize))

35. Token expire time is in token handler