How to create an API

**REMEMBER TO SAVE TO GITHUB!!!**

1. Must be inside a fullstack folder
2. Create an API folder
3. In terminal dotnet new webapi -o api
4. Inside API folder create Models folder
5. Inside Models folder create c# new class <name file>
6. Ex. Public int <name> { get; set; }
7. (Remember) Public string is string?
8. From .csproj file open Nuget Gallery use > open nuget gallery
9. Install Microsoft.EntityFrameworkCore
10. Install Microsoft.EntityFrameworkCore.Tools
11. Install Microsoft.EntityFrameworkCore.Sqlite (if using Sqlite)
12. .csproj file should show if they are installed
13. Inside API folder Create a Data Folder
14. Inside Data Folder create c# new class name it AppDBContext
15. Add : DbContext after public class

* Make sure “using” systems are in place (ie. Lightbulb, tab, IntelliSense)

1. Add public AppDbContext(DbContextOptions<AppDbContext> options) : base(options){}
2. Must be outside of 6.b’s curly brace add Public DbSet<name of model> <name of variable> { get; set; }

* Name of variable can be the model name with “s” at the end

1. Go to Program.cs add
   1. builder.Services.AddDbContext<AppDbContext>(options => options.UsleSqlite(builder.Configuration.GetConnectionString(“DefaultConnection”));

* Make sure “using” systems are in place (ie. Lightbulb, tab, IntelliSense)

1. Go to appsettings.json
   1. After “AllowedHosts”: “\*” add , then
   2. Add “ConnectionStrings” : { “DefaultConnection”:”Data Source=<name of Model>.db”
2. Inside API folder Create Controller Folder
3. Inside Controller Folder new c# API Controller <name of variable from 6.c> + Controller
4. Inside Program.cs under builder.Services.AddDbContext….
   1. Add builer.Services.AddControllers();
5. Under var app….
   1. Add app.MapControllers();
6. Now We Migrate out Tables
7. Open Terminal
   1. Make sure you are cd into api
8. dotnet ef migration add Init

(Can skip next section if not using Sqlite)

1. Inside API Folder create new file <name>.db
   1. Make sure it matches the data source inside the appsettings.json
2. Inside Terminal add
   1. dotnet ef database update