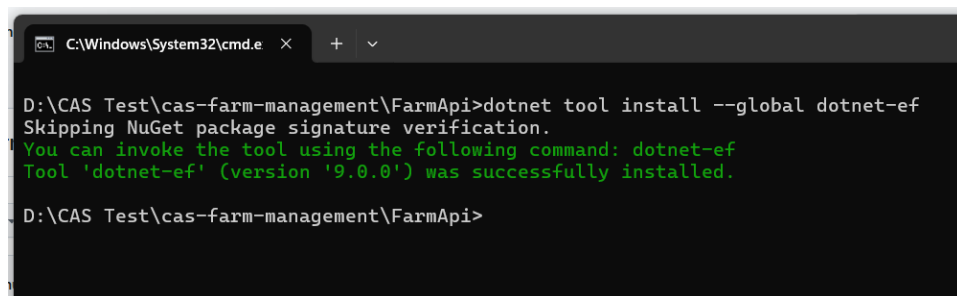


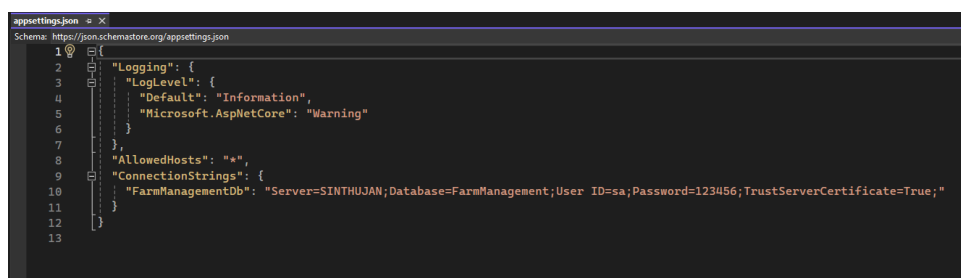
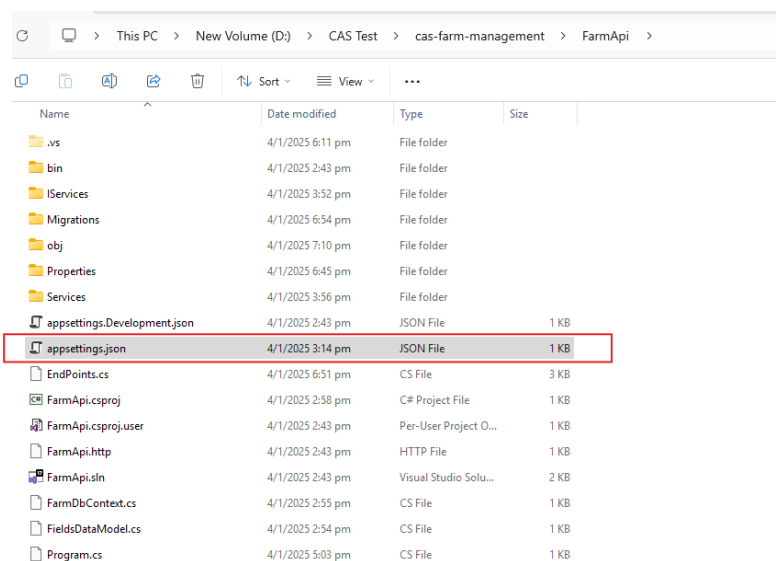
Farm API Guide

1. Prerequisites
 - a) Visual Studio (if using cmd to run the project, no need)
 - b) .Net 8 Installed
 - c) SQL Server installed
2. Clone Project Repository
 - a) git clone <https://github.com/knksinthujan/cas-farm-management.git>
 - b) cd cas-farm-management
3. Running the project using cmd
 - a) Run cmd "cd FarmApi"
 - b) Run cmd "dotnet tool install --global dotnet-ef"



```
C:\Windows\System32\cmd.exe
D:\CAS Test\cas-farm-management\FarmApi>dotnet tool install --global dotnet-ef
Skipping NuGet package signature verification.
You can invoke the tool using the following command: dotnet-ef
Tool 'dotnet-ef' (version '9.0.0') was successfully installed.
D:\CAS Test\cas-farm-management\FarmApi>
```

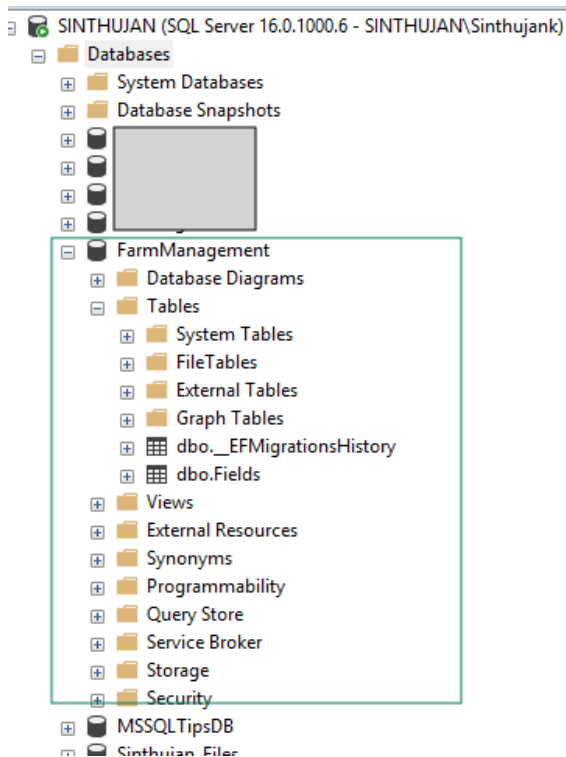
- c) Change the connection string in appsettings.json



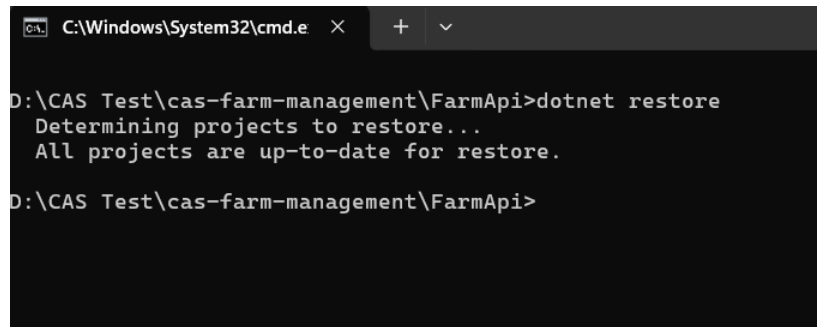
- d) Run cmd “dotnet ef database update” (if not able to do this, use attached script OR .bak file to restore DB)

```
D:\CAS Test\cas-farm-management\FarmApi>dotnet ef database update
Build started...
Build succeeded...
Info: Microsoft.EntityFrameworkCore.Database.Command[20101]
      Executed DbCommand (159ms) [Parameters=[], CommandType='Text', CommandTimeout='60']
      CREATE DATABASE [FarmManagement];
Info: Microsoft.EntityFrameworkCore.Database.Command[20101]
      Executed DbCommand (49ms) [Parameters=[], CommandType='Text', CommandTimeout='60']
      IF SERVERPROPERTY(<EngineEdition>) <= 5
      BEGIN
      ALTER DATABASE [FarmManagement] SET READ_COMMITTED_SNAPSHOT ON;
      END;
Info: Microsoft.EntityFrameworkCore.Database.Command[20101]
      Executed DbCommand (3ms) [Parameters=[], CommandType='Text', CommandTimeout='30']
      SELECT 1
Info: Microsoft.EntityFrameworkCore.Migrations[20011]
      Acquiring an exclusive lock for migration application. See https://aka.ms/efcore-docs-migrations-lock for more information if this takes too long.
      Acquiring an exclusive lock for migration application. See https://aka.ms/efcore-docs-migrations-lock for more information if this takes too long.
Info: Microsoft.EntityFrameworkCore.Database.Command[20101]
      Executed DbCommand (1ms) [Parameters=[], CommandType='Text', CommandTimeout='30']
      DECLARE @result int;
      EXEC @result = sp_getapplock @Resource = '__EFMigrationsLock', @LockOwner = 'Session', @LockMode = 'Exclusive';
Info: Microsoft.EntityFrameworkCore.Database.Command[20101]
      Executed DbCommand (6ms) [Parameters=[], CommandType='Text', CommandTimeout='30']
      IF OBJECT_ID(N'__EFMigrationsHistory') IS NULL
      BEGIN
      CREATE TABLE [__EFMigrationsHistory] (
      [MigrationId] nvarchar(150) NOT NULL,
      [ProductVersion] nvarchar(32) NOT NULL,
      CONSTRAINT [PK__EFMigrationsHistory] PRIMARY KEY ([MigrationId])
      );
      END;
Info: Microsoft.EntityFrameworkCore.Database.Command[20101]
      Executed DbCommand (1ms) [Parameters=[], CommandType='Text', CommandTimeout='30']
      SELECT 1
Info: Microsoft.EntityFrameworkCore.Database.Command[20101]
      Executed DbCommand (1ms) [Parameters=[], CommandType='Text', CommandTimeout='30']
      SELECT OBJECT_ID(N'__EFMigrationsHistory');
Info: Microsoft.EntityFrameworkCore.Database.Command[20101]
      Executed DbCommand (6ms) [Parameters=[], CommandType='Text', CommandTimeout='30']
      SELECT [MigrationId], [ProductVersion]
      FROM [__EFMigrationsHistory]
      ORDER BY [MigrationId];
Info: Microsoft.EntityFrameworkCore.Migrations[20002]
      Applying migration '20250104085410_Initial'.
      Applying migration '20250104085410_Initial'.
Info: Microsoft.EntityFrameworkCore.Database.Command[20101]
      Executed DbCommand (2ms) [Parameters=[], CommandType='Text', CommandTimeout='30']
      CREATE TABLE [Fields] (
      [Id] uniqueidentifier NOT NULL,
      [FieldName] nvarchar(max) NOT NULL,
      [FieldArea] float NOT NULL,
      [CropName] nvarchar(max) NOT NULL,
      [IsDeleted] bit NOT NULL,
      [CreatedBy] uniqueidentifier NOT NULL,
      [CreatedDate] datetime2 NOT NULL,
      [UpdatedBy] uniqueidentifier NULL,
      [UpdatedDate] datetime2 NULL,
      CONSTRAINT [PK_Fields] PRIMARY KEY ([Id])
      );
Info: Microsoft.EntityFrameworkCore.Database.Command[20101]
      Executed DbCommand (3ms) [Parameters=[], CommandType='Text', CommandTimeout='30']
      INSERT INTO [__EFMigrationsHistory] ([MigrationId], [ProductVersion])
      VALUES (N'20250104085410_Initial', N'9.0.0');
Info: Microsoft.EntityFrameworkCore.Database.Command[20101]
      Executed DbCommand (2ms) [Parameters=[], CommandType='Text', CommandTimeout='30']
      DECLARE @result int;
      EXEC @result = sp_releaseapplock @Resource = '__EFMigrationsLock', @LockOwner = 'Session';
      SELECT @result
Done.
D:\CAS Test\cas-farm-management\FarmApi>
```

- e) Now you should be able to see created db and tables

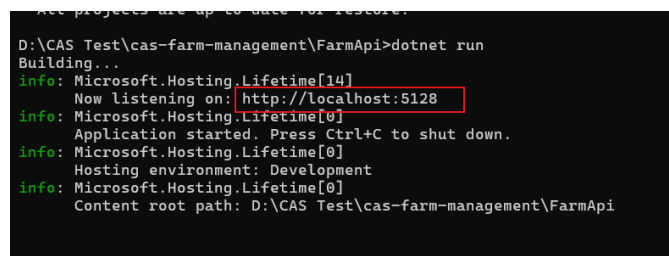


- f) Run cmd “dotnet restore”



```
C:\Windows\System32\cmd.e x + v
D:\CAS Test\cas-farm-management\FarmApi>dotnet restore
Determining projects to restore...
All projects are up-to-date for restore.
D:\CAS Test\cas-farm-management\FarmApi>
```

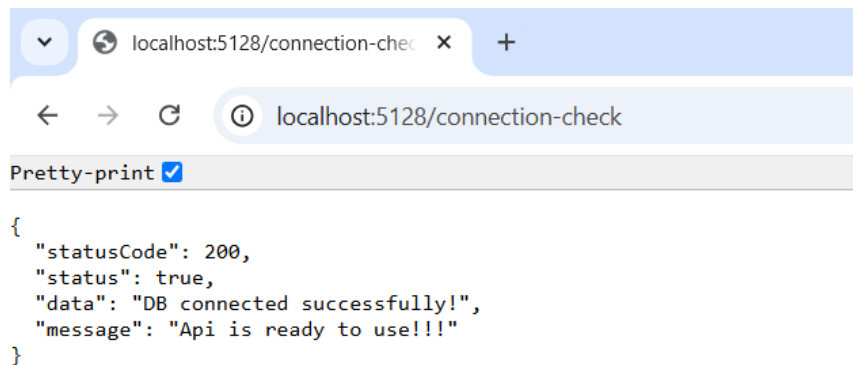
- g) Run cmd “dotnet run”



```
D:\CAS Test\cas-farm-management\FarmApi>dotnet run
Building...
info: Microsoft.Hosting.Lifetime[14]
      Now listening on: http://localhost:5128
info: Microsoft.Hosting.Lifetime[0]
      Application started. Press Ctrl+C to shut down.
info: Microsoft.Hosting.Lifetime[0]
      Hosting environment: Development
info: Microsoft.Hosting.Lifetime[0]
      Content root path: D:\CAS Test\cas-farm-management\FarmApi
```

Now the project is running

- h) Open <http://localhost:5128/connection-check> (Check listening port)



```
localhost:5128/connection-check x +
localhost:5128/connection-check
Pretty-print [checked]
{
  "statusCode": 200,
  "status": true,
  "data": "DB connected successfully!",
  "message": "Api is ready to use!!!"
}
```

*****You are done with API setup*****