*# Please refer https://aka.ms/HTTPSinContainer on how to setup an https developer certificate for your ASP .NET Core service.*

version: '3.4'

services:

  ms-sql-server:

    image: mcr.microsoft.com/mssql/server:2019-latest

    environment:

        ACCEPT\_EULA: "Y"

        SA\_PASSWORD: "Pa55w0rd2019"

        MSSQL\_PID: Express

    ports:

        - "1433:1433"

  testapi:

    image: test

    build:

      context: .

      dockerfile: ./Dockerfile

    ports:

      - 8080:8080

Dockerfile for the .net core

FROM mcr.microsoft.com/dotnet/aspnet:5.0-focal AS base

WORKDIR /app

EXPOSE 8080

ENV ASPNETCORE\_URLS=http://+:8080

*# Creates a non-root user with an explicit UID and adds permission to access the /app folder*

*# For more info, please refer to https://aka.ms/vscode-docker-dotnet-configure-containers*

RUN adduser -u 5678 --disabled-password --gecos "" appuser && chown -R appuser /app

USER appuser

FROM mcr.microsoft.com/dotnet/sdk:5.0-focal AS build

WORKDIR /src

COPY ["WebApplication1.csproj", "./"]

RUN dotnet restore "WebApplication1.csproj"

COPY . .

WORKDIR "/src/."

RUN dotnet build "WebApplication1.csproj" -c Release -o /app/build

FROM build AS publish

RUN dotnet publish "WebApplication1.csproj" -c Release -o /app/publish

FROM base AS final

WORKDIR /app

COPY --from=publish /app/publish .

ENTRYPOINT ["dotnet", "WebApplication1.dll"]

And the connection string for .net core

            var server = Configuration["DBServer"] ?? "ms-sql-server";

            var port = Configuration["DBPort"] ?? "1433";

            var user = Configuration["DBUser"] ?? "SA";

            var password = Configuration["DBPassword"] ?? "Pa55w0rd2019";

            var database = Configuration["Database"] ?? "test";

            var connectionString = @$"

               Server={server},{port};

               Database={database};

               User Id={user};

               Password={password}

            ";

            services.AddDbContext<Context>(opts => opts.UseSqlServer(connectionString));

to connect locally with mssql docker we have to put the server with localhost

            var server = Configuration["DBServer"] ?? "localhost";

and we have to update-database first to create the database in mssql docker container

Now .net core docker container work on port 8080

http://localhost:8080