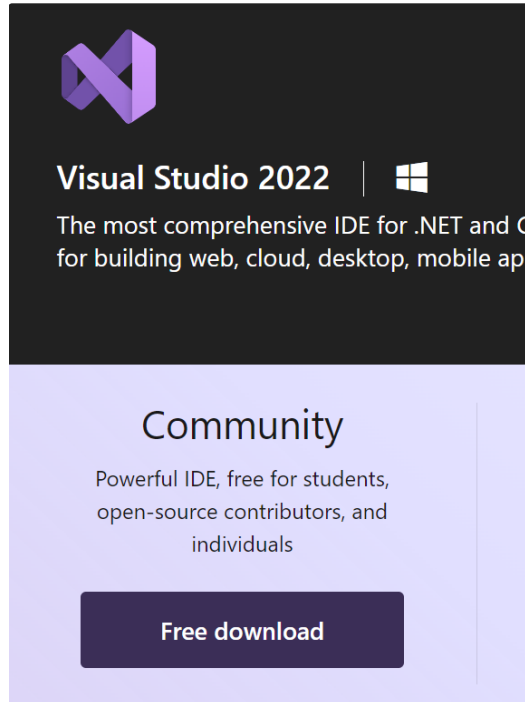
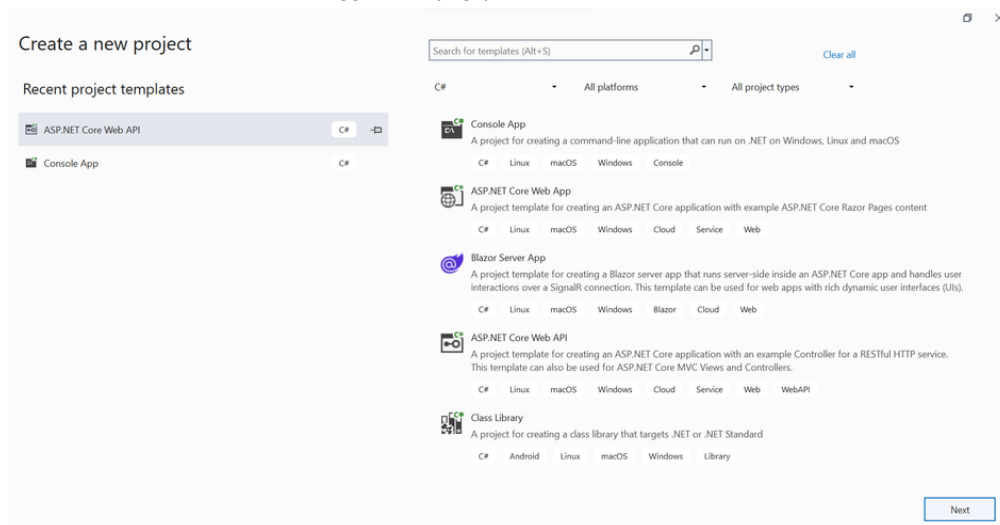


Visual Studio 2022

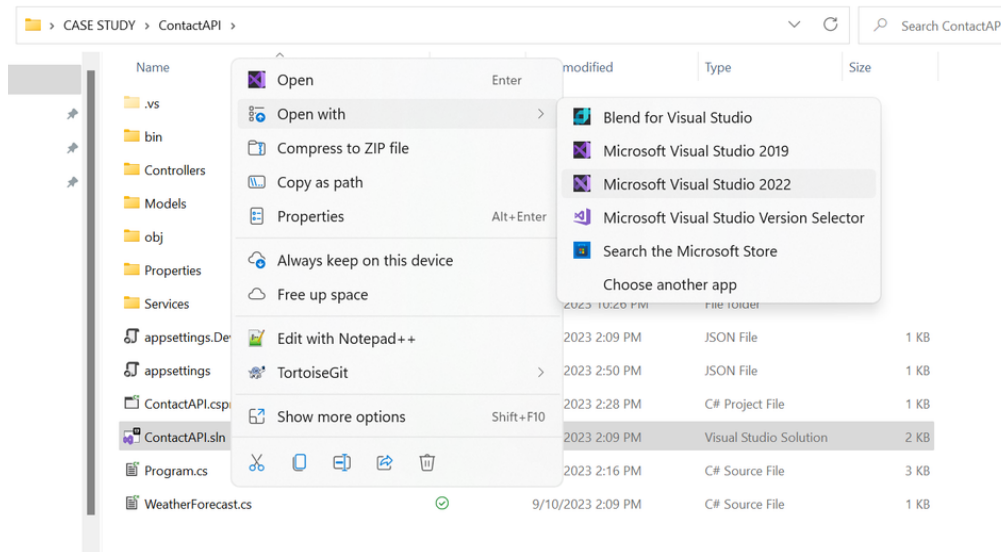
- Download [Download Visual Studio Tools - Community Version](#)



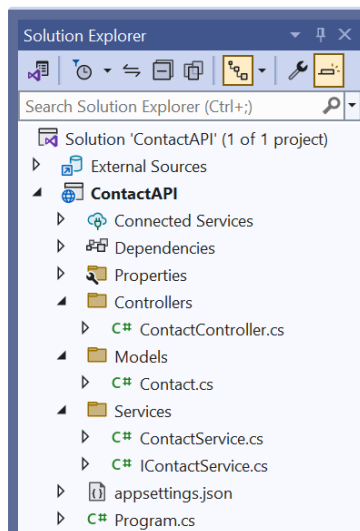
- You need to open a new project by selecting [ASP.NET Core Web API](#) (Just enter Project Name, all other values - default, Now run it to see default Weather Forecast Swagger Web page)



- For now just open the Folder in it (2022)



- You can see 3 Folders with 4 files in them.



- Models - Contact.cs has all the basic attributes

```
namespace ContactAPI.Models
{
    public class Contact
    {
        public int Id { get; set; }
        public string? firstname { get; set; }
        public string? lastname { get; set; }
        public string? gender { get; set; }
        public string? dob { get; set; }
        public string? email { get; set; }
        public string? phone { get; set; }
        public string? city { get; set; }
        public string? state { get; set; }
    }
}
```

- Services - IContactService.cs has all the function definitions

```

using ContactAPI.Models;

namespace ContactAPI.Services
{
    public interface IContactService
    {
        void AddContact(Contact contact);
        Contact GetContact(int id);
        List<Contact> GetContacts();
        void EditContact(Contact contact);
        void DeleteContact(int id);
    }
}

```

- Services - ContactService.cs has the declarations of all the defined functions

```

public void AddContact(Contact contact)
{
    try
    {
        command = new SqlCommand($"insert into contact values('{contact.firstname}','{contact.lastname}','{contact.genre}')");
        connection.Open(); //open the connection to the db
        command.ExecuteNonQuery();
    }
    catch (Exception)
    {
        throw;
    }
    finally
    {
        connection.Close();
    }
}

public void DeleteContact(int id)
{
}

```

- Controllers - ContactController.cs uses those functions and generated the links for hitting API

```

namespace ContactAPI.Controllers
{
    [Route("api/[controller]")]
    [ApiController]
    //[Authorize]
    [AllowAnonymous]

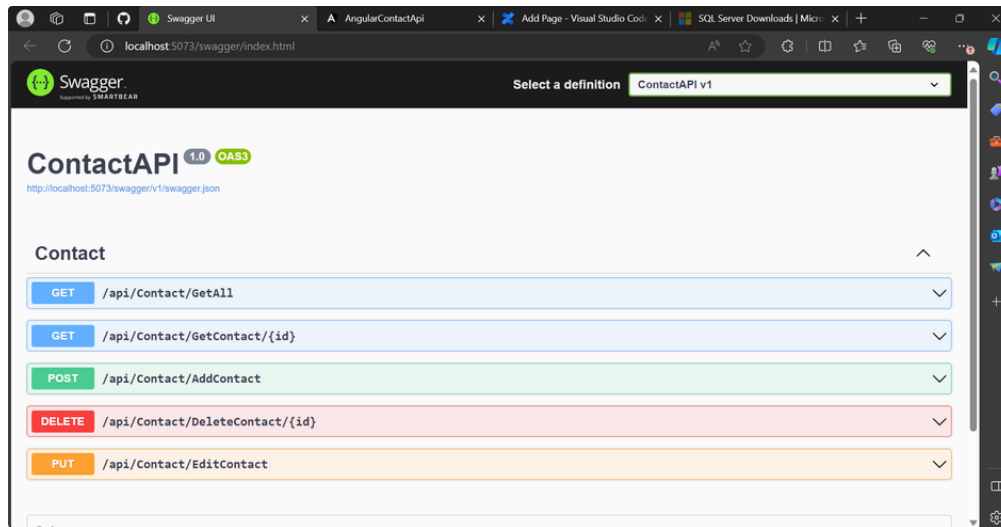
    1 reference
    public class ContactController : ControllerBase
    {
        private readonly ContactService contactService;

        0 references
        public ContactController(ContactService contactService)
        {
            this.contactService = contactService;
        }

        [HttpGet, Route("GetAll")]
        0 references
        public IActionResult GetAllContacts()
        {
}

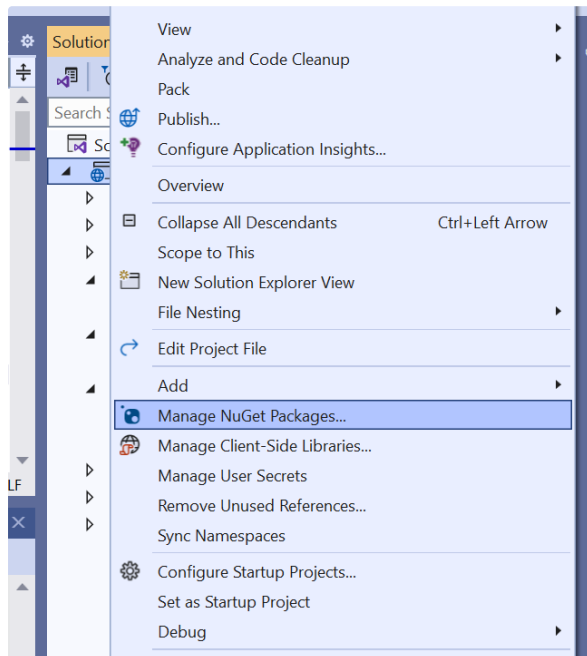
```

- Now if you run it you can see this output

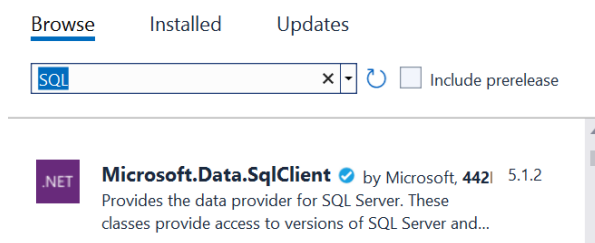


To fix ERRORS use these:

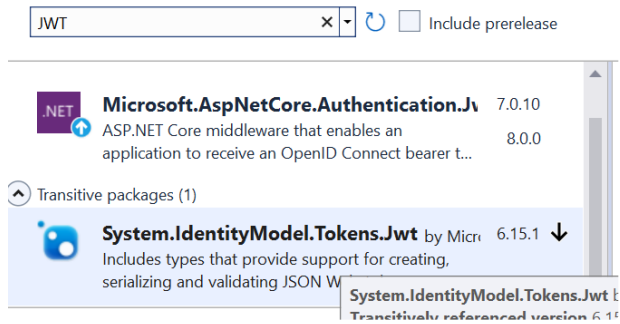
- To remove errors 1st download these 2 packages. Right Click on Folder name → Manage NuGet Packages



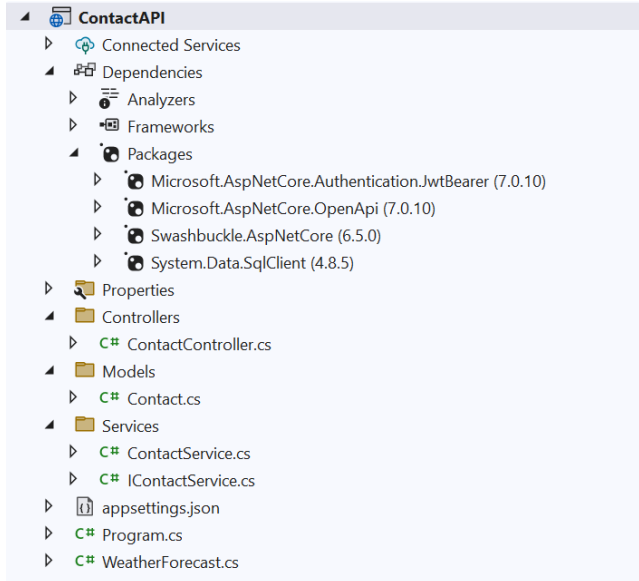
- 1) SQL Errors



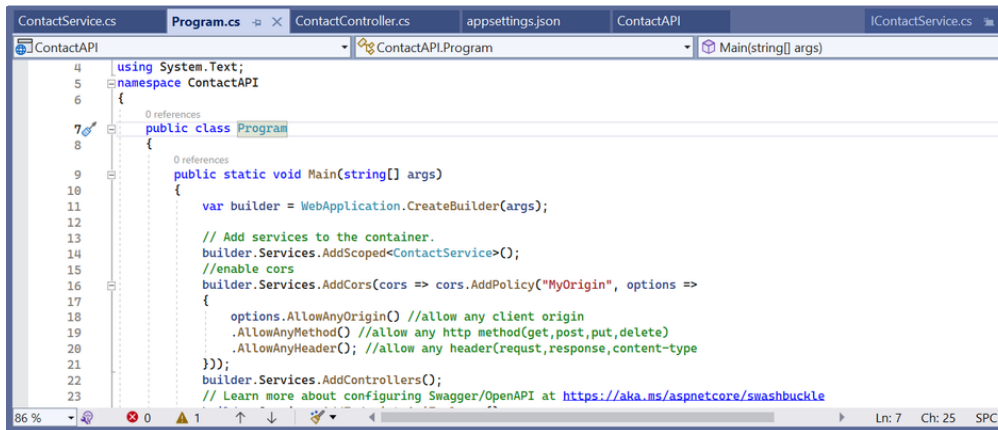
- 1) JWT Errors



- Now your Packages looks like this (Other 2 are default packages)



- Allow Any Origin ()

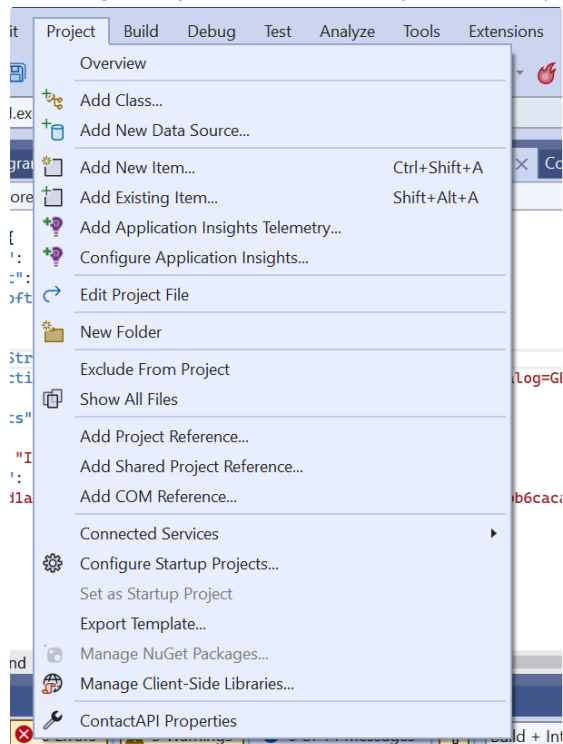


- SQL Connection (Change Data Source->"./SQLEXPRESS" + Initial Catalog="_Database name_")



```
1 {
2   "Logging": {
3     "LogLevel": {
4       "Default": "Information",
5       "Microsoft.AspNetCore": "Warning"
6     }
7   },
8   "ConnectionStrings": {
9     "GEPConnection": "Data Source=HYD-S8LLNW3\\SQLEXPRESS;Initial Catalog=GEPDB;Integrated Security=True"
10  },
11  "AllowedHosts": "*",
12  "Jwt": {
13    "Issuer": "Issuer",
14    "Audience": "Audience",
15    "Key": "bd1a1ccf8095037f361a4d351e7c0de65f0776bfc2f478ea8d31c763bb6caca"
16  }
17 }
18
```

- To run it, goto Project → ContactAPI Properties → Setup StartUp Object → ContactAPI.program



Startup object

Defines the entry point to be called when the application loads. Generally this is the main form in your application or to the 'Main' procedure that should run when application starts. Class libraries do not define an entry point.

ContactAPI.Program

OUTPUT checking

- Click on Try it Out → Execute

Contact

GET /api/Contact/GetAll

Parameters

No parameters

Try it out

Responses

Code	Description	Links
200	Success	No links

- Now you can see all the database values here

curl -X 'GET' \

```
curl -X 'GET' \
  'http://localhost:5073/api/Contact/GetAll' \
  -H 'accept: */*'

```

Request URL

http://localhost:5073/api/Contact/GetAll

Server response

Code	Details
200	<p>Response body</p> <pre>[{ "id": 1, "firstname": "Cat", "lastname": "Doraemon", "gender": "Male", "dob": "1883.01.02", "email": "doraemon@gmail.com", "phone": "11311", "city": "Study Table 1", "state": "Tokyo", "country": "Japan", "picture": ".\\assets\\Doraemon.jpg" }, { "id": 2, "firstname": "Cat", "lastname": "Dorami", "gender": "Female", "dob": "1893.01.01", "email": "dorami@gmail.com", "phone": "22223", "city": "Study Table 2", }]</pre>

- All Functions

Contact

- GET /api/Contact/GetAll
- GET /api/Contact/GetContact/{id}
- POST /api/Contact/AddContact
- DELETE /api/Contact/DeleteContact/{id}
- PUT /api/Contact/EditContact

- GetAll - Gives all the details which are in the database.
- GetContact{id} - Provides Contact details based on Contact Id
- AddContact - Need to provide the details to add the new user.
- DeleteContact{id}- Provide Id to delete the contact.
- EditContact - Provide the specific id which is already existing & change the details to new ones.