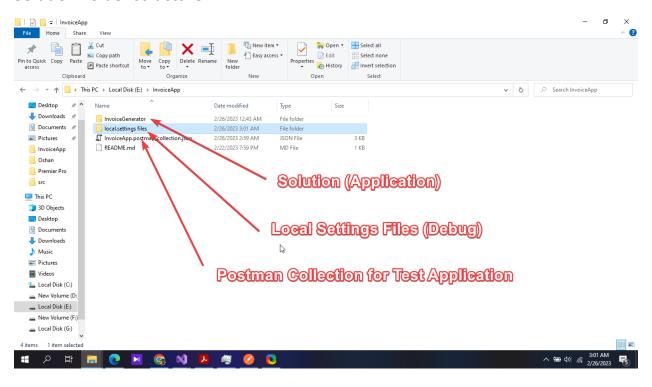
Solution Setup and Design

Pre-Requisite Software's required to be installed.

- Cosmos Db Emulator
- Visual Studio 2022 with .Net 6 installed



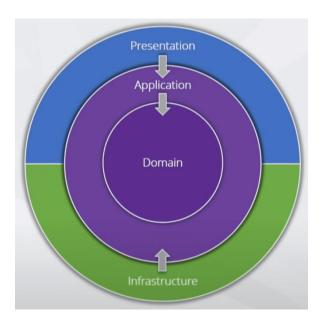
Solution Folder structure



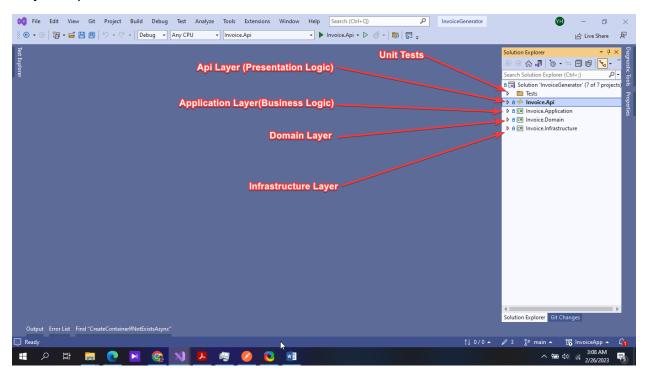
Notes.

- Application is developed using Domain driven design by using Clean Architecture
- Used CQRS pattern with mediator
- Used NUnit For Unit Testing
- Azure function as presentation Logic
- Added cosmos DB as the data persist mechanism.

Clean Architecture



Project Layered Structure



Special Notes

- Project is design in a way to automatically create database and the container if there is no database or container already created.
- If required data seeding in CREATE function prior, have to uncomment the below lines mentioned.

```
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                                                                                                                                                   InvoiceGenerator
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▼ SInvoice.Api.CreateInvoice

        nvoice.Api
                                                                                                                                                                                       ⊕ ☆ ♬ | ७ • ≒ 🗏 @ | 😘 •
                           1 reference | Yasith Hettige, 2 days ago | public class CreateInvoice {
                                                                                                                                                                                  △ 🖂 Solution 'InvoiceGenerator' (7 of 7 projects
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                                                                                                                                                                                      Tests
                                private readonly ICosmosDbSeed _seed;
private readonly IMediator _mediator;
                                                                                                                                                                                   🗸 🖰 🦑 Invoice.Api
                                                                                                                                                                                        Connected Services
                                                                                                                                                                                      ▶ & Dependencies
                                 Oreferences | Yasith Hettige, 2 days ago | 1 author, 1 change
public CreateInvoice(IMediator mediator, ItosmosDbSeed seed) Uncomment below if required seeding
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                                                                                                                                                                                     a _____ .gitignore

▶ a C# CreateInvoice.cs
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                                      this._seed = seed ?? throw new ArgumentNullException(nameof(seed));
                                                                                                                                                                                        ∆ (i) host.json
                                                                                                                                                                                      D A C# Startup.cs
                                [FunctionName("CreateInvoiceWithInvoiceLines")]
                                                                                                                                                                                      D ≜ C# UpdateInvoice.cs
                                public async Task<IActionResult> Run(
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                                                                                                                                                                                    ● C■ Invoice.Application
                                      [HttpTrigger(AuthorizationLevel.Function, "post", Route = null)] HttpRequest req,
                                                                                                                                                                                    ▶ ≜ 🖙 Invoice.Domain
                                                                                                                                                                                    log.LogInformation("C# HTTP trigger CreateInvoiceWith) nvoiceLines function processed a request.");
                                     //Please uncomment this if you need some seed data
//await _seed.InvoiceItemSeed();
                                      string requestBody = await new StreamReader(req.Body).ReadToEndAsync();
                                     InvoiceItemDto data = JsonConvert.DeserializeObject<InvoiceItemDto>(requestBody);
InvoiceItemDto response = await _mediator.Send(new CreateInvoiceCommand() { InvoiceItemDto = data });
                                     string responseMessage = $"This HTTP triggered function CreateInvoiceWithInvoiceLines executed successfull
responseMessage += $"Created Object Id - {response.Id}.";
                                                                                                                                                                    11 0/0 ▲ Ø 3 $º main ▲ □ In
```

- To Run the Apis Please use the provided Postman Test Collection by importing it to the Postman



