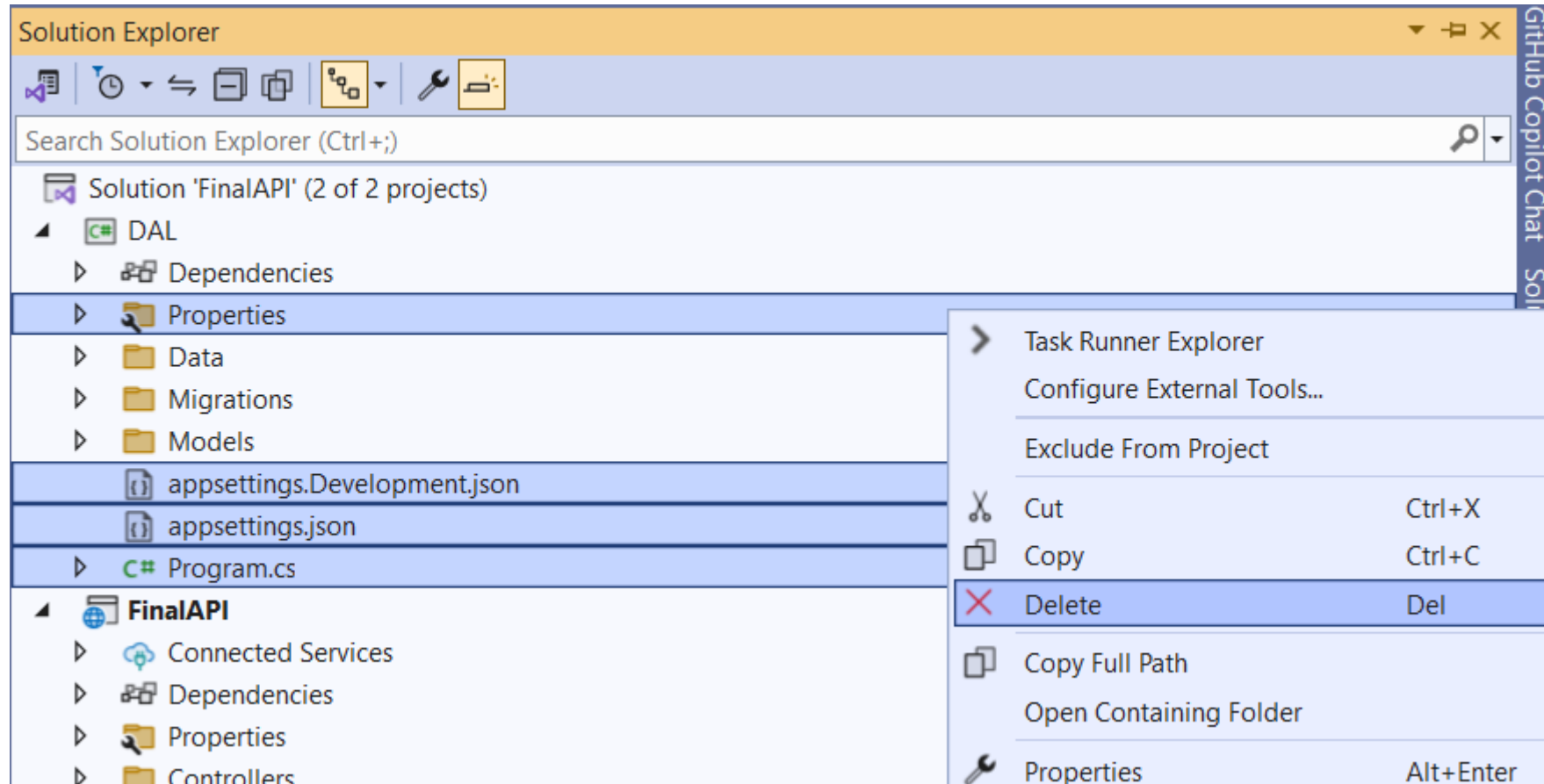


# Azure Deployment

# נהפוך את הפרוייקט DAL לפרוייקט class library

```
DAL  + x
1  <Project Sdk="Microsoft.NET.Sdk">
2  |
3  <PropertyGroup>
4  |   <TargetFramework>net8.0</TargetFramework>
5  |   <Nullable>enable</Nullable>
6  |   <ImplicitUsings>enable</ImplicitUsings>
7  |   <OutputType>Library</OutputType>
8  | </PropertyGroup>
9  |
10 <ItemGroup>
11 |   <PackageReference Include="Microsoft.AspNetCore.Identity.EntityFrameworkCore" Version="8.0.0" />
12 |   <PackageReference Include="Microsoft.EntityFrameworkCore.SqlServer" Version="8.0.0" />
13 |   <PackageReference Include="Microsoft.EntityFrameworkCore.Tools" Version="8.0.0" />
14 |   <PrivateAssets>all</PrivateAssets>
15 |   <IncludeAssets>runtime; build; native; contentfiles; analyzers; buildtransitive</IncludeAssets>
16 | </PackageReference>
17 |   <PackageReference Include="Microsoft.VisualStudio.Web.CodeGeneration.Design" Version="8.0.0" />
18 |   <PackageReference Include="Swashbuckle.AspNetCore" Version="6.4.0" />
19 | </ItemGroup>
20 |
21 </Project>
```

# נהפוך את הפרוייקט DAL לפרוייקט class library



# נוסיף את החבילה Design של Entity Framework Core לפרוייקט הראשי שלנו כדי שנוכל להריץ migrations

Ńîçşôşôğŧ ĖŋŧîŧŧŧGşăŋêxôşlCôşê Dêşîğŋ



```
Project Sdk="Microsoft.NET.Sdk.Web">
```

```
<PropertyGroup>
```

```
<TargetFramework>net8.0</TargetFramework>
```

```
<Nullable>enable</Nullable>
```

```
<ImplicitUsings>enable</ImplicitUsings>
```

```
</PropertyGroup>
```

Enable implicit global usings for the C# project. Possible values are enable, true, and disable.

```
<ItemGroup>
```

```
<PackageReference Include="Microsoft.AspNetCore.Authentication.JwtBearer" Version="8.0.8" />
```

```
<PackageReference Include="Microsoft.AspNetCore.Identity.EntityFrameworkCore" Version="8.0.8"
```

```
<PackageReference Include="Swashbuckle.AspNetCore" Version="6.4.0" />
```

```
<PackageReference Include="Microsoft.EntityFrameworkCore.Design" Version="8.0.4" />
```

```
</ItemGroup>
```

```
<ItemGroup>
```

# יצירת Resource Group

[Home](#) >

## Resource groups

Default Directory (tomerbugmail.onmicrosoft.com)

+ Create



Manage view



Refresh



Export to CSV



Create a new resource group.

[New version of Browse experience. Some features may be missing.](#)



Filter for any field...

Subscription equals **all**

Location equals



Name ↑



DefaultResourceGroup-SEA



rg-cloud-deploy

[Home](#) > [Resource groups](#) >

## Create a resource group

Basics

Tags

Review + create

**Resource group** - A container that holds related resources for an Azure solution. The resource group can include all the resources for the solution, or only those resources that you want to manage as a group. You decide how you want to allocate resources to resource groups based on what makes the most sense for your organization. [Learn more](#)

### Project details

Subscription \* ⓘ

Azure subscription 1

Resource group \* ⓘ

rg-tomerbu-group

### Resource details

Region \* ⓘ

(Asia Pacific) Southeast Asia

Review + create

4

Next : Tags >

# יצירה של App Service

[Home](#) >

## App Services



Default Directory (tomerbugmail.onmicrosoft.com)

+ Create ▾



Manage Deleted Apps



Manage view

Filter for any field...

Subscription equals **all**

Re

Showing 1 to 1 of 1 records.



Name ↑↓

[Home](#) >

## App Services



Default Directory (tomerbugmail.onmicrosoft.com)

+ Create ▾



Manage Deleted Apps



+ Web App

+ Static Web App

+ Web App + Database

+ WordPress on App Service

# יצירה של App Service

[Home](#) > [App Services](#) >

## Create Web App ...

Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription \* ⓘ

Azure subscription 1

Resource Group \* ⓘ

rg-cloud-deploy

[Create new](#)

### Instance Details

Name

hackeru

.azurewebsites.net

☐

Try a unique default hostname (preview). [More about this update](#)

Publish \*

☒

Code

☐

Container

Runtime stack \*

.NET 8 (LTS)

Operating System \*

☐

Linux

☒

Windows

Region \*

Southeast Asia



Not finding your App Service Plan? Try a different region or select your App Service Environment.

[Review + create](#)

[< Previous](#)

[Next : Deployment >](#)

# יצירה של App Service הגדרות CI/CD

[Home](#) > [App Services](#) >

Create Web App ...

Basics **Deployment** Networking Monitor + secure Tags Review + create

## Continuous deployment settings

Set up continuous deployment to easily deploy code from your GitHub repository via GitHub Actions. [Learn more](#)

Continuous deployment ☐ Disable ☒ Enable

## GitHub settings

Set up GitHub Actions to push content to your app whenever there are code changes made to your repository. Note: Your GitHub account must have write access to the selected repository in order to add a workflow file which manages deployments to your app.

GitHub account

TomerBu

Change account



Organization \*

TomerBu



Repository \*

D290323ER



Branch \*

main



## Workflow configuration

Click the button below to preview what the GitHub Actions workflow file will look like before setting up continuous deployment.

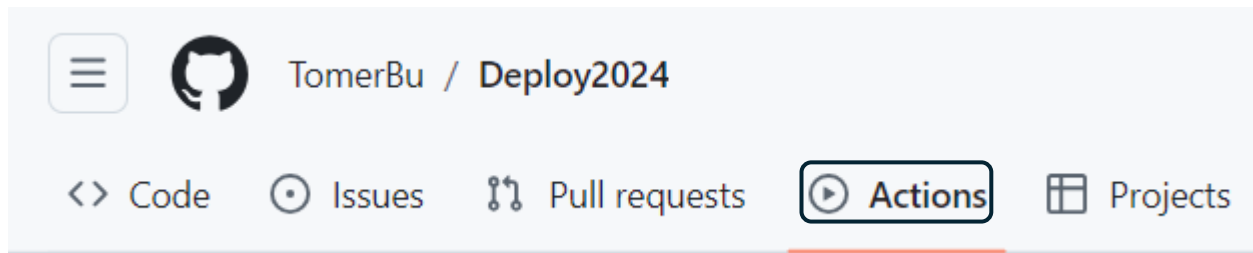
Review + create

< Previous

Next : Networking >



# יצירה של App Service הגדרות CI/CD



הגדרות CI/CD בגיטהאב

## עריכת קובץ workflow

(בפרויקט שלנו יש מספר תיקיות ולכן  
הקוד הסנטדרטי דורש מעט שינויים)

הגדרות CI/CD בגיטהאב

```
1 # Docs for the Azure Web Apps Deploy action: https://github.com/Azure/webapps-deploy
2 # More GitHub Actions for Azure: https://github.com/Azure/actions
3
4 name: Build and deploy ASP.Net Core app to Azure Web App - itomerbu
5
6 on:
7   push:
8     branches:
9       - main
10  workflow_dispatch:
11
12 jobs:
13   build:
14     runs-on: windows-latest
15
16     steps:
17       - uses: actions/checkout@v4
18
19       - name: Set up .NET Core
20         uses: actions/setup-dotnet@v4
21         with:
22           dotnet-version: '8.x'
23
24       - name: Build with dotnet
25         run: dotnet build ./FinalAPI/FinalAPI.sln --configuration Release
26
27       - name: dotnet publish
28         run: dotnet publish ./FinalAPI/FinalAPI/FinalAPI.csproj -c Release -o
```

הפקודה דורשת מרכאות ""



# יצירה של App Service הגדרות CI/CD

בדיקה שהכל עובד:



TomerBu / Deploy2024

🔍 Type  to search

<> Code   ⌚ Issues   🔗 Pull requests   **▶ Actions**   📁 Projects   📖 Wiki   🛡 Security   📈 Insights   ⚙ Settings

← Build and deploy ASP.Net Core app to Azure Web App - itomerbu

✅ Update main\_itomerbu.yml #4

🏠 Summary

Jobs

✅ build

✅ deploy

Run details

🕒 Usage

📄 Workflow file

Triggered via push 33 minutes ago

👤 TomerBu pushed 4f8b6e6 main

Status

Success

Total duration

3m 46s

Artifacts

1

main\_itomerbu.yml

on: push

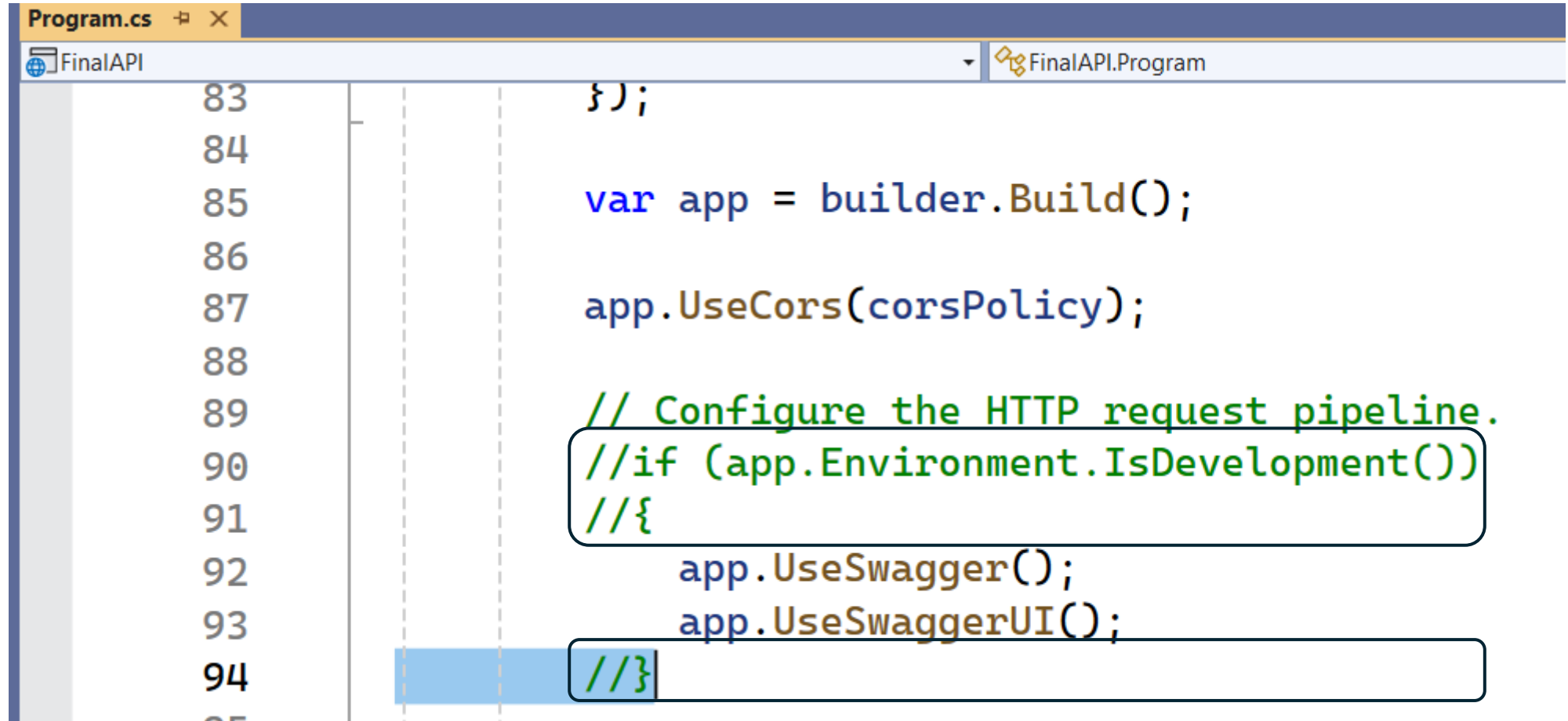
✅ build

2m 9s

✅ deploy

1m 13s

# אפשר של SwaggerUI במצב production (מאפשר לנו גם דוקומנטציה וגם בדיקות של ה-API)



```
Program.cs  FinalAPI  FinalAPI.Program
83      });
84
85      var app = builder.Build();
86
87      app.UseCors(corsPolicy);
88
89      // Configure the HTTP request pipeline.
90      //if (app.Environment.IsDevelopment())
91      //{
92          app.UseSwagger();
93          app.UseSwaggerUI();
94      //}
```

עכשיו נבצע Commit חדש לגיטהאב ונראה שצד לקוח מתחבר לצד השרת

<https://itomerbu.azurewebsites.net/swagger/index.html>

# הגדרות של דטה-בייס:

## Azure services



Create a resource



App Services



Resource groups



Subscriptions



Static Web Apps



SQL servers



Azure SQL



Storage accounts



SQL databases



More services

Home >

## SQL servers

Default Directory (tomerbugmail.onmicrosoft.com)



Create



Manage view



Refresh



Export

Filter for any field...

Subscription equals all

Showing 0 to 0 of 0 records.

Name ↑↓

# הגדרות של דטה-בייס:

Home > SQL servers >

## Create SQL Database Server

Microsoft

Basics Networking Security Additional settings Tags Review + create

SQL database server is a logical container for managing databases and elastic pools. Complete the Basic tab, then go to Review + Create to provision with smart defaults, or visit each tab to customize. [Learn more](#)

### Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription \* ⓘ Azure subscription 1

Resource group \* ⓘ rg-cloud-deploy

[Create new](#)

### Server details

Enter required settings for this server, including providing a name and location.

Server name \* db-cloud-deploy ✓  
.database.windows.net

Location \* (Asia Pacific) Australia Southeast



נגלול למטה לעוד הגדרות חשובות



Review + create

Next : Networking >

# הגדרות של דטה-בייס:

## Authentication

 Azure Active Directory (Azure AD) is now Microsoft Entra ID. [Learn more](#) 

Select your preferred authentication methods for accessing this server. Create a server admin login and password to access your server with SQL authentication, select only Microsoft Entra authentication [Learn more](#)  using an existing Microsoft Entra user, group, or application as Microsoft Entra admin [Learn more](#) , or select both SQL and Microsoft Entra authentication.

Authentication method

- ☐ Use Microsoft Entra-only authentication
- ☐ Use both SQL and Microsoft Entra authentication
- ☒ Use SQL authentication

Server admin login \*

itomerbu ✓

Password \*

..... ✓



Confirm password \*

..... ✓












Review + create


Next : Networking >

# הגדרה של ה connection string בענן




Home > **App Services**  

Default Directory (tomerbugmail.onmicrosoft.com)

 Create  Manage Deleted Apps  Manage view  Refresh  Export to CSV  Open query |  Assign tags  Start  Restart  Stop  Delete

Filter for any field... Subscription equals **all** Resource group equals **all** X Location equals **all** X  Add filter

Showing 1 to 1 of 1 records. No grouping

<input type="checkbox"/> Name ↑↓	Status ↑↓	Location ↑↓	Pricing Tier ↑↓	App Service Plan ↑↓	Subs
<input type="checkbox"/>  itomerbu 	Running	Southeast Asia	Free	 ASP-rgclouddeploy-a6dc	Azur



# הגדרה של ה connection string בענן



Search

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Microsoft Defender for Cloud

Events (preview)

Better Together (preview)

> Deployment

Settings

{x} Environment variables

App settings

Connection strings

Search

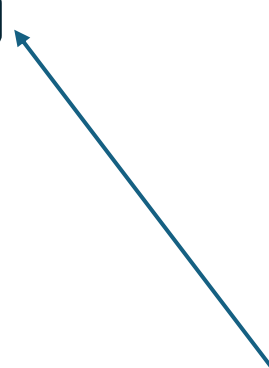
+ Add

# הגדרה של ה connection string בענן

## Add/Edit connection string



Name *	<input type="text" value="ContextDAL"/>
Value	<input type="text" value="Server=db-cloud-deploy.database.windows.net;Database=FinalProjectDB;User ID=itomerbu;Password=Password1!aA;Encrypt=True;Tr..."/>
Type *	<input type="text" value="SQLServer"/>
<small>At runtime, connection strings are available as environment variables. <a href="#">Learn more</a></small>	
Deployment slot setting	<input type="checkbox"/>



Server=db-cloud-deploy.database.windows.net;Database=FinalProjectDB;User ID=itomerbu;Password=Password1!aA;Encrypt=True;TrustServerCertificate=False;Connection Timeout=30;

Apply

Discard

Apply/apply/save

# הפעלה של המיגרציות עם העלאת השרת:

```
var app = builder.Build();

app.UseCors(corsPolicy);

// Apply pending migrations at startup
using (var scope = app.Services.CreateScope())
{
    var services = scope.ServiceProvider;
    try
    {
        var context = services.GetRequiredService<ContextDAL>();
        context.Database.Migrate();
    }
    catch (Exception ex)
    {
        Console.WriteLine($"An error occurred while migrating the database: {ex.Message}");
    }
}
```

עכשיו נבצע Commit חדש לגיטהאב ונראה שהדטה-בייס עובד

# צפייה בנתונים השמורים בדטה-בייס

The screenshot displays the Microsoft Azure portal interface. At the top, the navigation bar includes the Microsoft Azure logo, a search bar, and various utility icons. The breadcrumb trail shows 'Home > SQL servers >' with a circled '1' next to it. The main heading is 'SQL servers' with a subtext 'Default Directory (tomerbugmail.onmicrosoft.com)'. Below this, there are buttons for '+ Create', 'Manage view', and a dropdown menu. A filter bar is present with the text 'Filter for any field...'. A table lists the SQL servers, with the first entry 'db-cloud-deploy' highlighted and circled with a '2'. The left sidebar shows the 'Overview' tab selected, with options for 'Activity log', 'Access control (IAM)', 'Tags', 'Quick start', and 'Diagnose and solve problems'. The main content area shows the details for 'db-cloud-deploy', including a search bar, a list of actions ('+ Create database', '+ New elastic pool', '+ New dedicated SQL pool (formerly SQL DW)', 'Import database', 'Reset password'), and an 'Essentials' section with links for 'Resource group (move)', 'Status', 'Location', and 'Subscription (move)'. On the right, the 'Server admin' section shows 'itomerbu' and the 'Networking' section shows 'Show networking settings' circled with a '3'. The 'Server name' is listed as 'db-cloud-deploy.database.windows.net'.

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

Home > SQL servers > 1

SQL servers

Default Directory (tomerbugmail.onmicrosoft.com)

+ Create Manage view ...

Filter for any field...

Name ↑↓

db-cloud-deploy 2

Overview

Activity log

Access control (IAM)

Tags

Quick start

Diagnose and solve problems

db-cloud-deploy SQL server

Search

+ Create database + New elastic pool + New dedicated SQL pool (formerly SQL DW) Import database Reset password

Essentials

Resource group (move) rg-cloud-deploy

Status Available

Location Australia Southeast

Subscription (move) Azure subscription 1

Server admin itomerbu

Networking Show networking settings 3

Microsoft Entra admin Not configured

Server name db-cloud-deploy.database.windows.net

# צפייה בנתונים השמורים בדטה-בייס

Rule      Virtual network      Subnet      Address ra...      Endpoint sta...      Resource gro...      Subscripti...      State

## Firewall rules

Allow certain public internet IP addresses to access your resource. [Learn more](#)

1

+ Add your client IPv4 address (46.117.232.143) + Add a firewall rule

Rule name

Start IPv4 address

End IPv4 address

ClientIPAddress\_2024-10-27\_16-35-1

46.117.232.143

46.117.232.143



## Exceptions

☒ Allow Azure services and resources to access this server ⓘ

2

Save

Discard

# צפייה בנתונים השמורים בדטה-בייס

Connect to Server

## SQL Server

Login | Connection Properties | Always Encrypted | Additional Connection Parameters

Server

Server type: Database Engine

Server name: db-cloud-deploy.database.windows.net

Authentication: SQL Server Authentication

Login: itomerbu

Password: .....

☒ Remember password

Connection Security

Encryption: Mandatory

☐ Trust server certificate

Host name in certificate:

Connect Cancel Help Options <<


# צפייה בנתונים השמורים בדטה-בייס


The screenshot displays the SQL Server Enterprise Manager interface. On the left, the Object Explorer shows the database structure for 'FinalProjectDB', including tables like 'dbo.Products'. The main pane shows a SQL query in 'SQLQuery3.sql' that selects the top 1000 records from the 'Products' table, listing columns: Id, Name, Description, Price, ImageUrl, and CategoryId. Below the query, the 'Results' tab shows a table with 2 rows of data. The first row represents a 'Macbook Pro' with an Id of 1, and the second row represents a 'Toy car' with an Id of 2.

```
SELECT TOP (1000) [Id]
, [Name]
, [Description]
, [Price]
, [ImageUrl]
, [CategoryId]
FROM [dbo].[Products]
```

	Id	Name	Description	Price	ImageUrl	CategoryId
1	1	Macbook Pro	A Computer	999.90		2
2	2	Toy car	A Wooden Toy car	10.00		1

# העלאת פרוייקט צד לקוח:

 .env.production ✕

 .env.production

```
1 VITE_BASE_URL=https://itomerbu.azurewebsites.net/api
2 VITE_MODE=production
```



# העלאת פרוייקט צד לקוח:

The image shows the Visual Studio Code interface. The top menu bar includes File, Edit, Selection, View, and a search bar containing 'frontend'. The left sidebar displays the 'EXTENSIONS: MARKETPLACE' view with a search for 'AZURE TOOLS'. Three extensions are listed: 'Azure Tools' (highlighted), 'Azure CLI Tools', and 'Azure Resource Manag...'. The 'Azure Tools' extension is by Microsoft, version 1.2.0, and has 8 ratings. The right pane shows the details for 'Azure Tools', including the Microsoft logo, version 'v1.2.0', and the description 'Get web site hosting, SQL and Mong...'. It features an 'INSTALL' button, an 'Uninstall' button with a dropdown arrow, and a checked 'Auto Upd' checkbox. Below the buttons are tabs for 'DETAILS' and 'FEATURES'.

File Edit Selection View ...

frontend

EXTENSIONS: MARKETPLACE

AZURE TOOLS

**Azure Tools**  
Get web site hosting, SQL and Mong...  
Microsoft

**Azure CLI Tools**  
Tools for developing and running co...  
Microsoft

**Azure Resource Manag...** 1.3M ★ 4

**Azure Tools** v1.2.0  
Microsoft microsoft.com | 1  
Get web site hosting, SQL and Mong...  
INSTALL Uninstall Auto Upd  
DETAILS FEATURES

# העלאת פרוייקט צד לקוח:

⚡ vite.config.ts ✕

⚡ vite.config.ts > ...


```
1  import { defineConfig } from 'vite'
2  import react from '@vitejs/plugin-react'
3
4  // https://vitejs.dev/config/
5  export default defineConfig({
6    |   plugins: [react()],
7    |   base:   "./",
8  });
```

# העלאת פרוייקט צד לקוח:

```
package.json X
package.json > {} scripts
5  "type": "module",
   Debug
6  "scripts": {
7    "prod": "vite --mode production",
8    "dev": "vite",
9    "build": "tsc -b && vite build --mode production",
10   "lint": "eslint . --ext ts,tsx --report-unused-disa
11   "preview": "vite preview"
12 },
13 "dependencies": {
14   "axios": "^1.7.7",
```


npm run build  
cd dist  
npx serve


# העלאת פרוייקט צד לקוח: Azure Portal


 Microsoft Azure


Search resources, services, and docs (G+)


Azure services


  
Create a resource


  
Static Web Apps

  
SQL servers


  
App Services

  
Resource groups






  
Subscriptions

  
Azure SQL

Home >

Static Web Apps  ...

Default Directory (tomerbugmail.onmicrosoft.com)

 Create  Manage view   Refresh  Export to

Filter for any field... Subscription equals **all** Re

Showing 0 to 0 of 0 records.

Name ↑↓

# העלאת פרוייקט צד לקוח: Azure Portal

**Basics**   Advanced   Tags   Review + create

App Service Static Web Apps is a streamlined, highly efficient solution to take your static app from source code to global high availability. Pre-rendered content is distributed globally with no web servers required. [Learn more](#) ↗

## Project Details

Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription \* ⓘ

Azure subscription 1



Resource Group \* ⓘ

rg-cloud-deploy



[Create new](#)

## Static Web App details

Name \*

react



## Hosting plan

The hosting plan dictates your bandwidth, custom domain, storage, and other available features. [Compare plans](#)

Plan type



Free: For hobby or personal projects



Standard: For general purpose production apps



Dedicated (preview): For general purpose production apps

**Review + create**

< Previous

Next : Advanced >

# העלאת פרוייקט צד לקוח: Azure Portal

**i** If you can't find an organization or repository, you might need to enable additional permissions on GitHub. You must have write access to your chosen repository to deploy with GitHub Actions.

Organization \*

TomerBu

Repository \*

DeployClient2024


Branch \*

main

## Build Details

Enter values to create a GitHub Actions workflow file for build and release. You can modify the workflow file later in your GitHub repository.

Build Presets

 React (detected)

**i** These fields will reflect the app type's default project structure. Change the values to suit your app. [Learn more](#)

App location \* ⓘ

/

Api location ⓘ

e.g. "api", "functions", etc...

Output location ⓘ

dist

## Workflow configuration

Click the button below to preview what the GitHub Actions workflow file will look like before setting up continuous deployment.


Preview workflow file

Review + create

< Previous


Next : Advanced >

# העלאת פרוייקט צד לקוח: Azure Portal

 Microsoft Azure

Search resources, services, and docs (G+ /)

Home >


 **Microsoft.Web-StaticApp-Portal-e3eb097d-87a3** | Overview ⚙ ...


Deployment


Search


×


⏪


 Delete


 Cancel


 Redeploy


 Download


 Refresh


 Overview

 Inputs

 Outputs

 Template

 Your deployment is complete

 Deployment name : Microsoft.Web-StaticApp-Portal-e3eb097d-87a3

Subscription : [Azure subscription 1](#)

Resource group : [rg-cloud-deploy](#)

Stai


Cor

> Deployment details

✓ Next steps

Go to resource

Give feedback

 Tell us about your experience with deployment

# העלאת פרוייקט צד לקוח: Azure Portal

Microsoft Azure

Search resource

Home > Microsoft.Web-StaticApp-Portal-e3eb097d-87a3 | Overview >

**react** Static Web App

Search

View app in browser Refresh Delete Manage deployment

Thank you for using Azure Static Web Apps! We have not received any comments yet.

**Overview**

- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Settings
- Monitoring
- Automation
- Help

**Essentials**

Resource group ( <a href="#">move</a> )	: <a href="#">rg-cloud-deploy</a>
Subscription ( <a href="#">move</a> )	: <a href="#">Azure subscription 1</a>
Subscription ID	: 6eee2d2d-20a8-4c7a-b0c7-12559b267c1
Location	: Global
Sku	: Free
Tags ( <a href="#">edit</a> )	: <a href="#">Add tags</a>

**Get started** Monitoring Deployment history

**View your application**

Status: Waiting for deployment

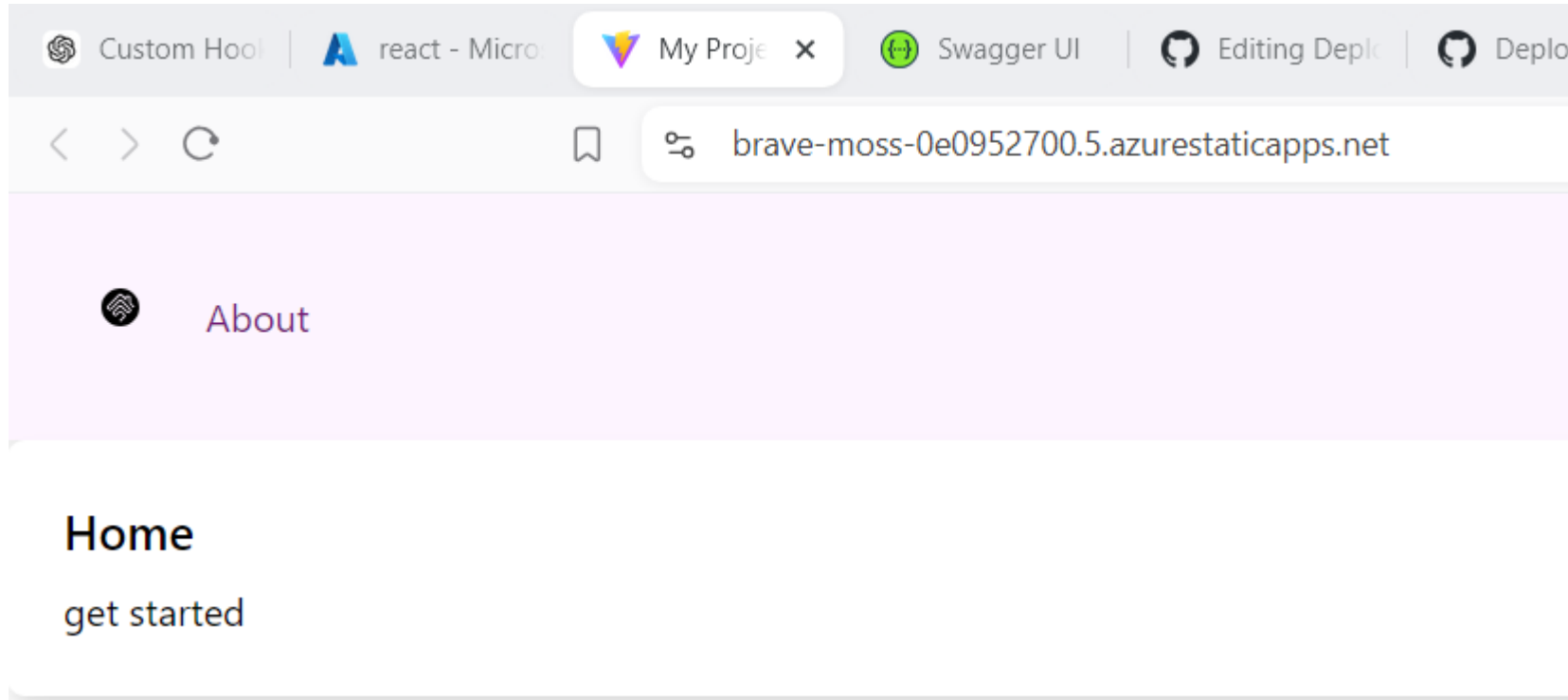
Environment: Production

[Visit your site](#)

כשזה יסתיים אפשר יהיה לראות את האתר באוויר



# העלאת פרוייקט צד לקוח: Azure Portal



עובד 😊

עכשיו רק נשאר להגדיר הגדרות CORS בצד שרת וסיימנו את כל התהליך

# עדכון הגדרות Cors בצד שרת

```
Program.cs
FinalAPI
FinalAPI.Program
Main(string[] args)

65
66     var corsPolicy = "CorsPolicy";
67
68     //var host = builder.Configuration.GetValue<string>("AllowedHosts");
69     builder.Services.AddCors(options =>
70     {
71         options.AddPolicy(name: corsPolicy, policy =>
72         {
73             policy.WithOrigins([
74                 "http://localhost:3000",
75                 "http://localhost:5173",
76                 "http://localhost:5174",
77                 "https://brave-moss-0e0952700.5.azurestaticapps.net/"
78             ])
79             //host
```

עכשיו נבצע Commit חדש לגיטהאב ונראה שצד לקוח מתחבר לצד השרת