TEC | Tecnológico de Costa Rica

Instituto Tecnológico de Costa Rica

Computer Engineering School

Professor: Marco Rivera Meneses

Course: Bases de datos – CE3101

Group 1

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Project II – StraviaTEC

Installation Manual

II Semester, 2023

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To install StraviaTEC you will need to have installed the next programs as prerequisites:

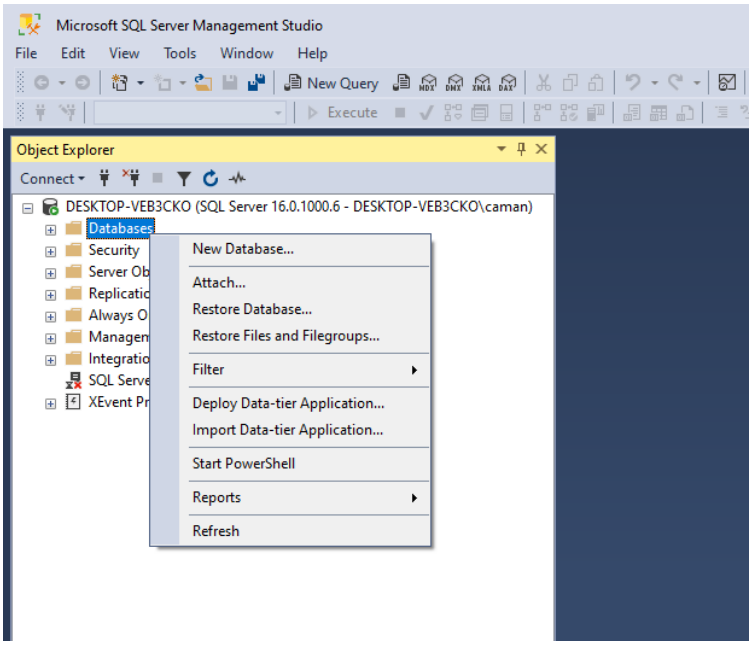
- .NET Runtime 6.0.22
- ASP.NET Core Runtime 6.0.22 (Hosting Bundle)
- MS SQL Server
- Node JS

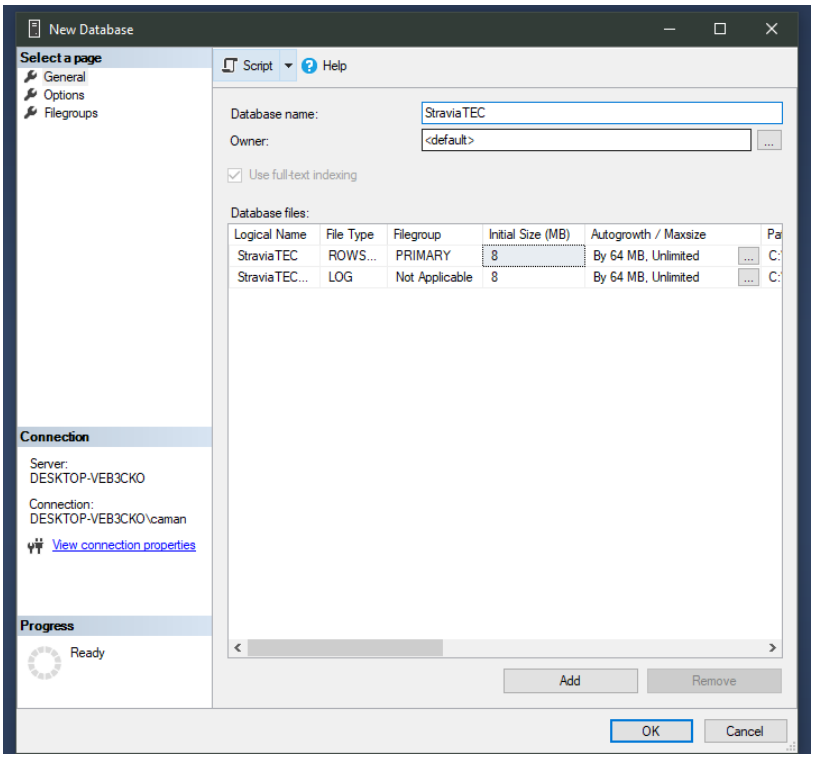
Furthermore, the minimum hardware specifications to run StraviaTEC are the following:

- Processor x64, 4 cores or more
- Minimum 4 GB RAM
- Minimum 30 GB free HDD Space

BackEnd Local Execution

First, we have to set up the SQL Server database and for this you have to open SQL Server GUI and create a new database called StraviaTEC:





Then we have to Run the next querys in the new database StraviaTEC in the following order:

1. CreationScript.sql
2. Views.sql
3. StoredProcedures.sql
4. PopulationScript.sql

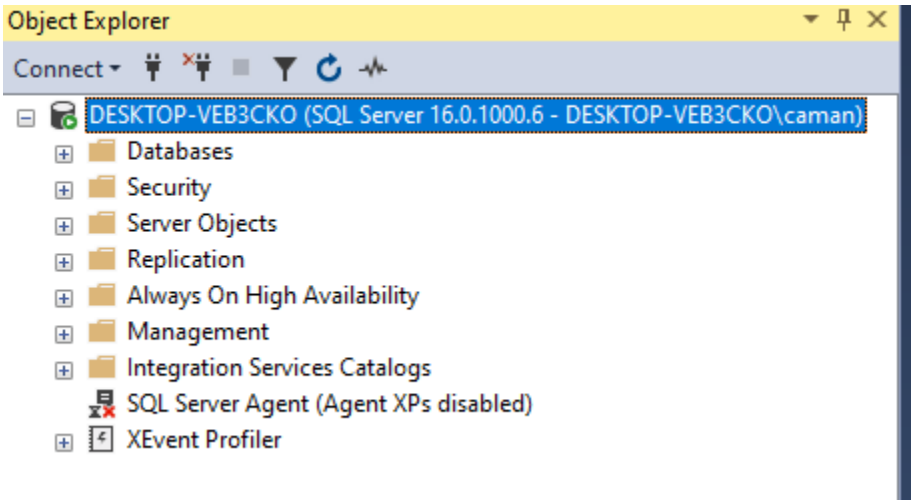
You can find those scripts in the following directory in the StraviaTEC Github repository:

StraviaTEC\StraviaTEC_API\Scripts_DB

Now you have just configured the database and the next step is to set open the API. For this you have to open the StraviaTEC_API solution with Microsoft Studio and go to the appsettings.json file and change the server name for your own:

```
},
"AllowedHosts": "*",
"ConnectionStrings": {
  "ConnectionString": "server=DESKTOP-VEB3CKO; database=StraviaTEC; integrated security=true; Encrypt=False;"
},
```

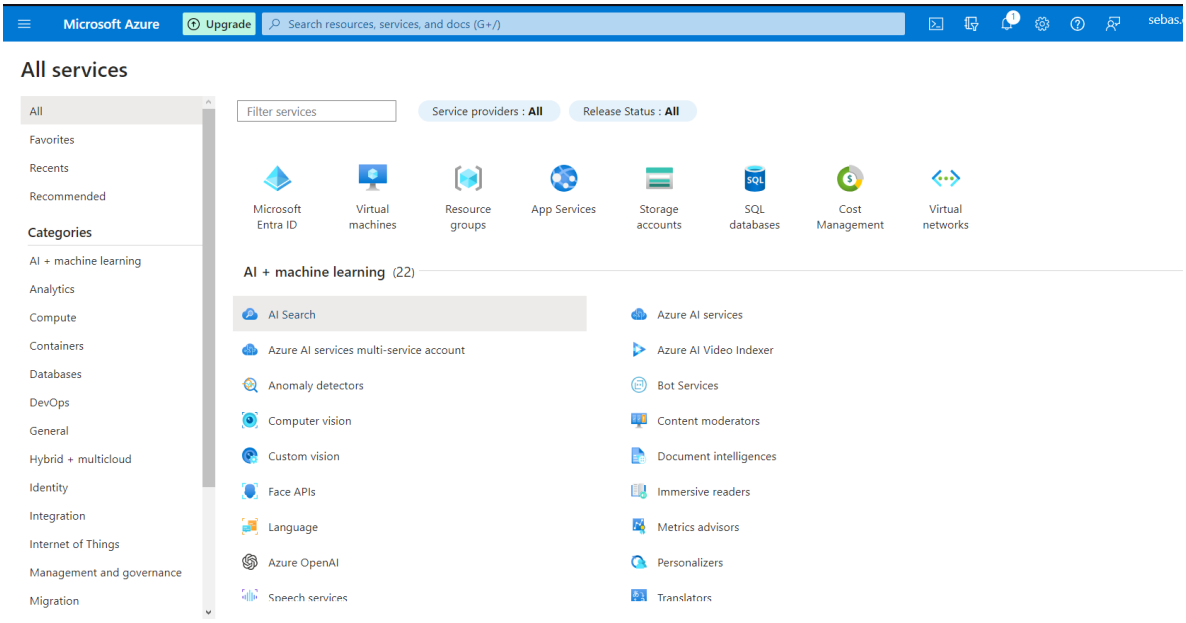
You can check your server name in SQL Server:



Once you have done this you can execute the API and proceed to install the web application.

BackEnd Global Deployment

If you want to deploy StraviaTEC API globally you will need to create an Azzure account, for this you will receive $200 worth of credits to pay the app hosting for the API for a while. Once you have you account ready, you have to create the resource's group:



All services > 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

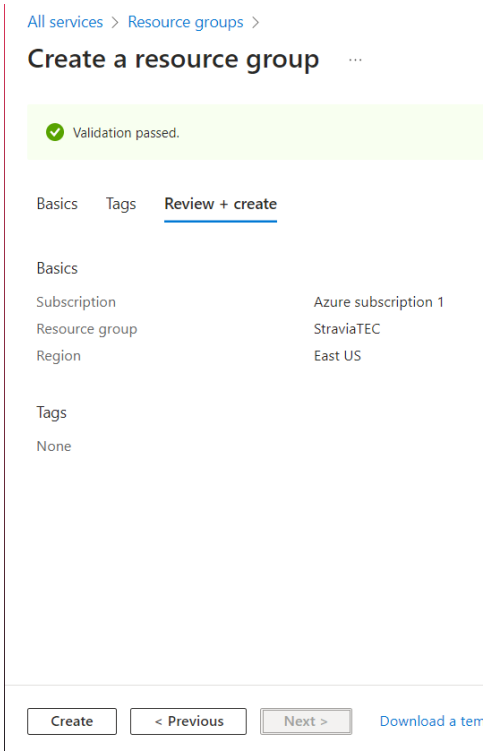
Subscription * : Azure subscription 1

Resource group * :

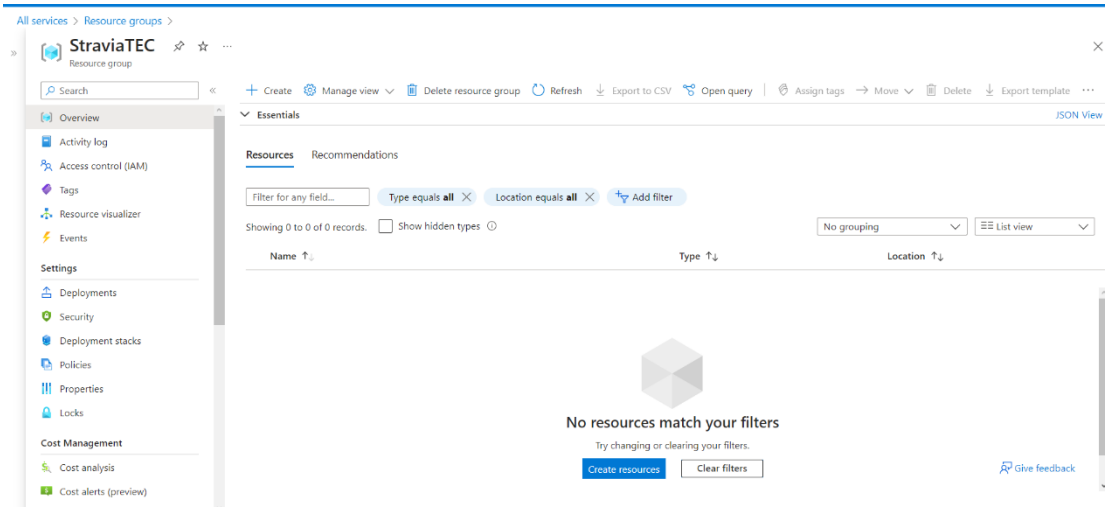
Resource details

Region * : (US) East US

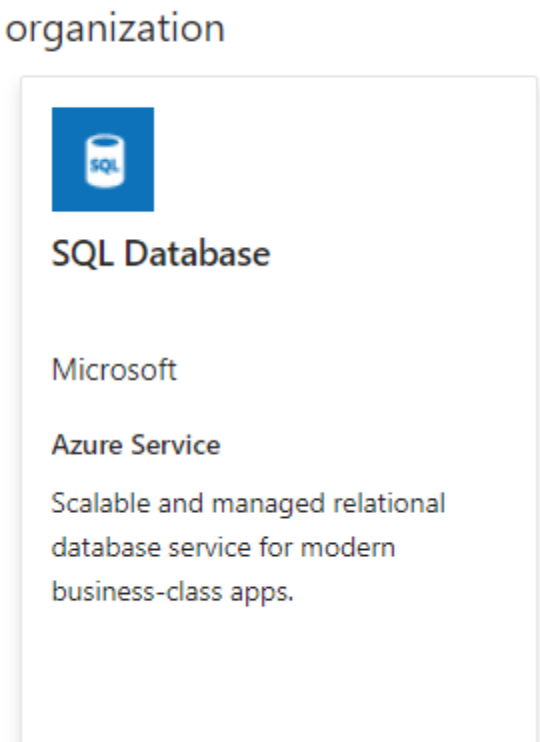
Review + create | < Previous | Next : Tags >

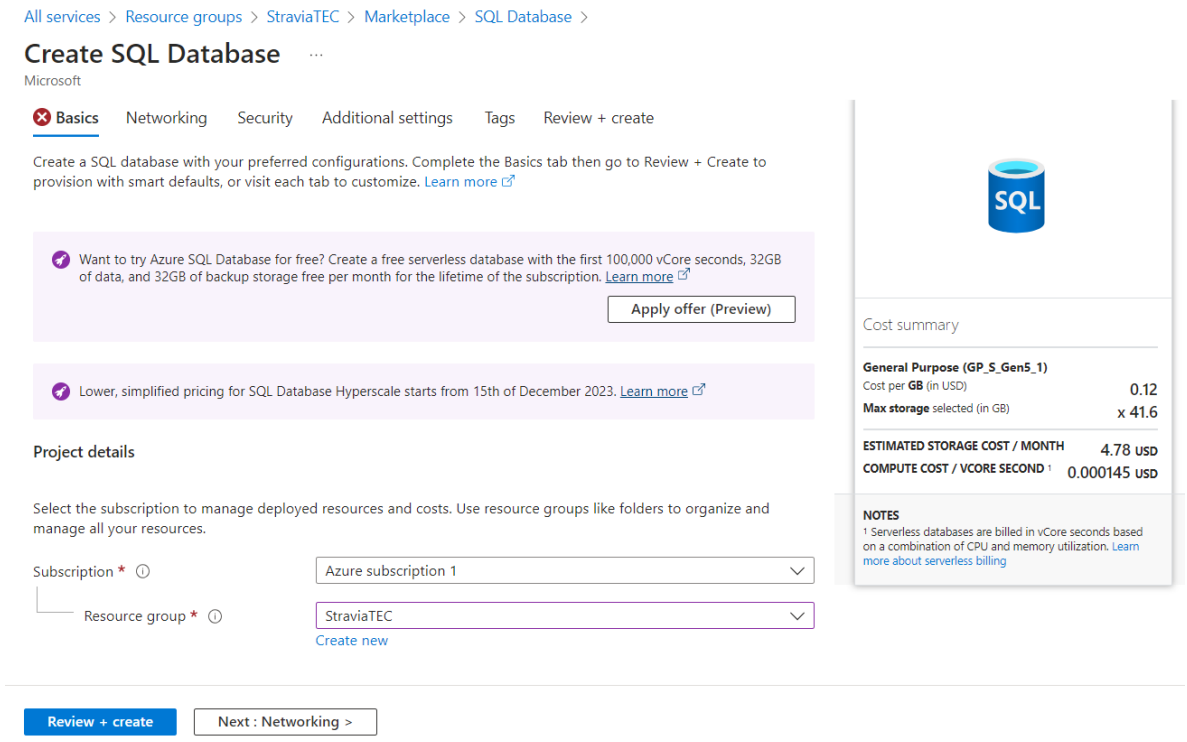


Then, inside the resource's group you create new resources:

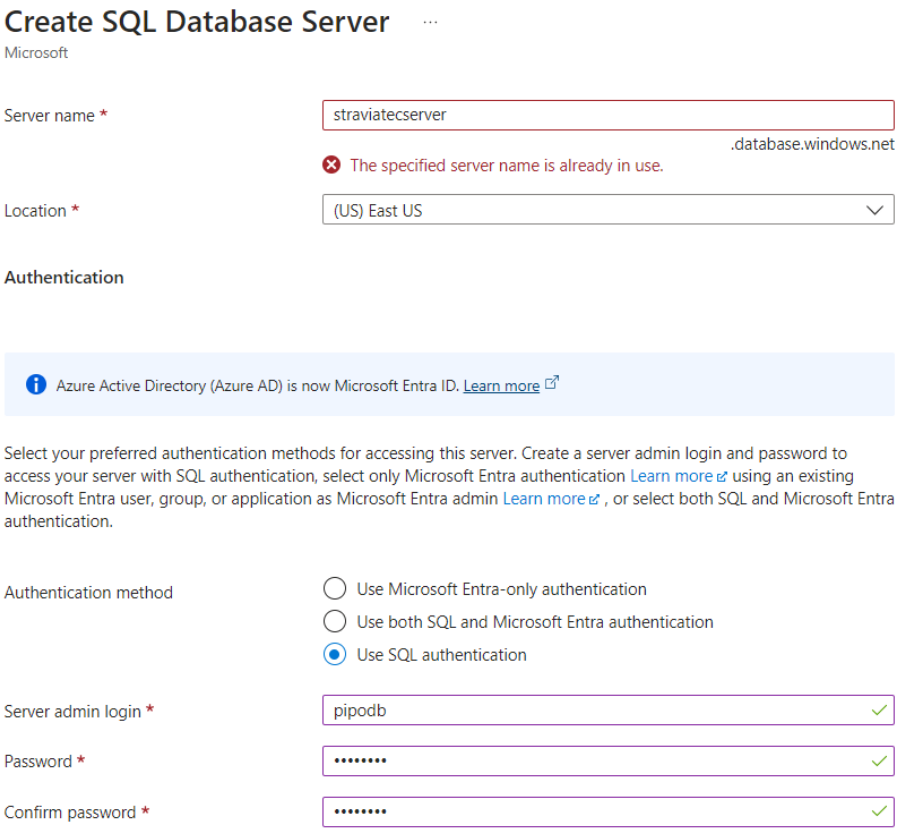


You select the option for a database;

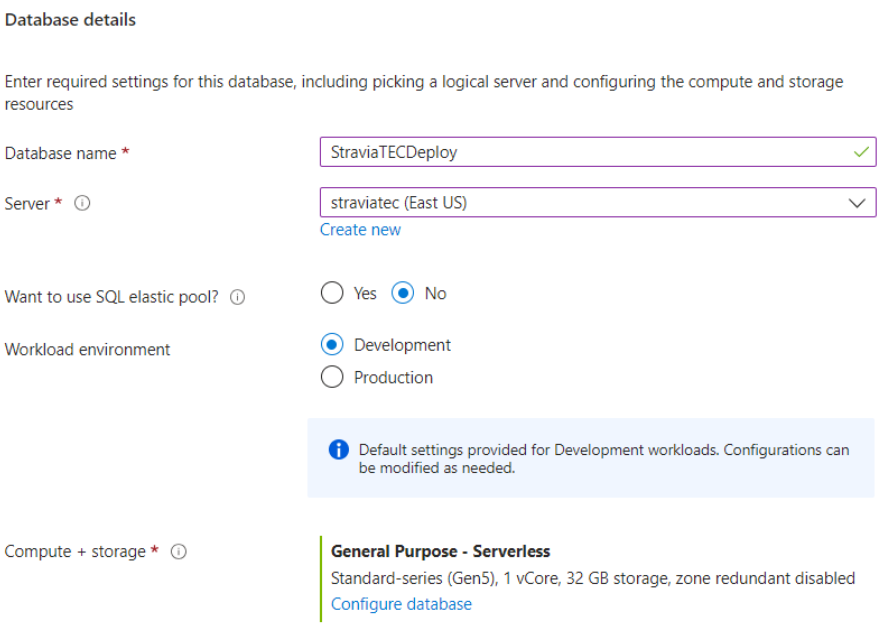




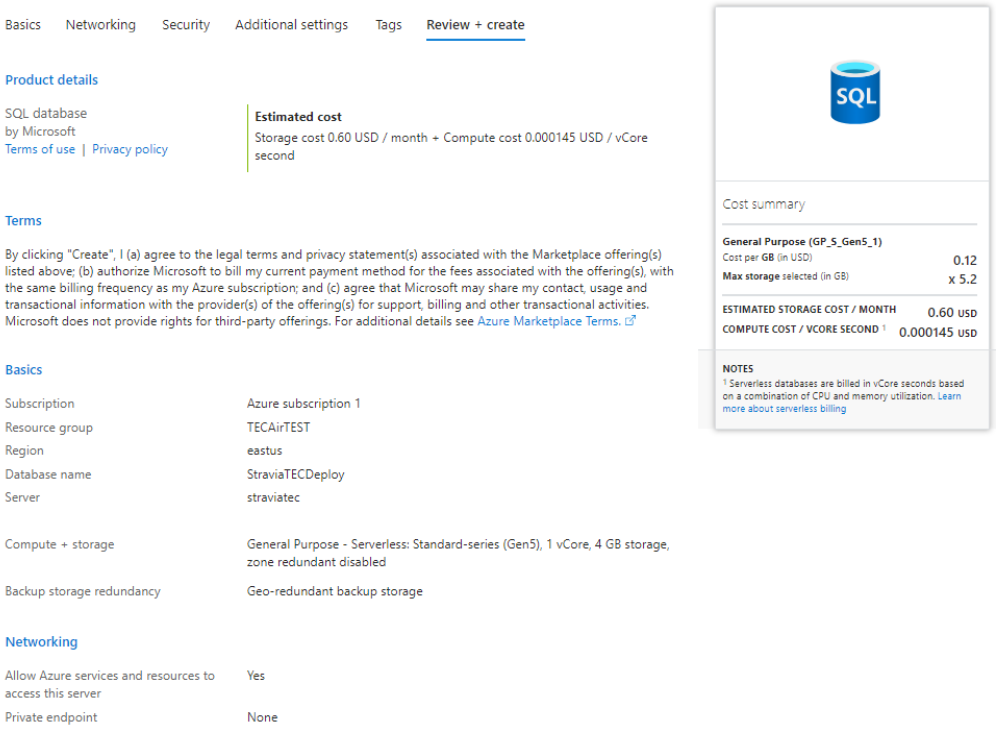
And then create a new server:



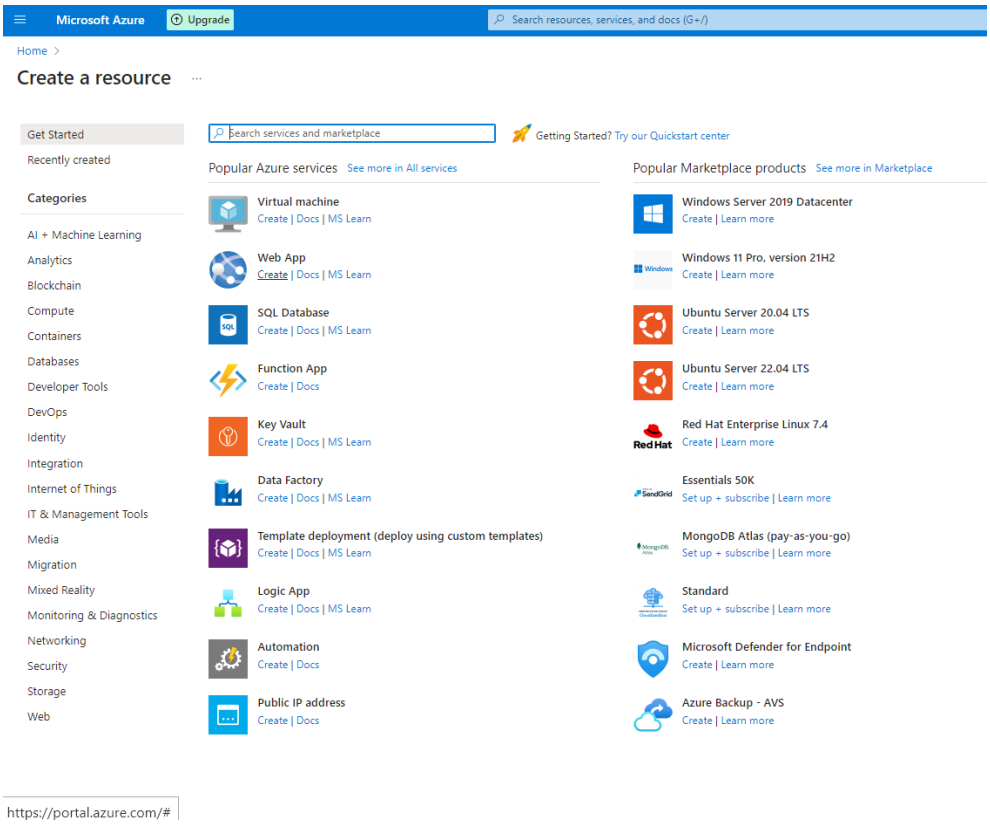
You have to set up the details for the SQL database:



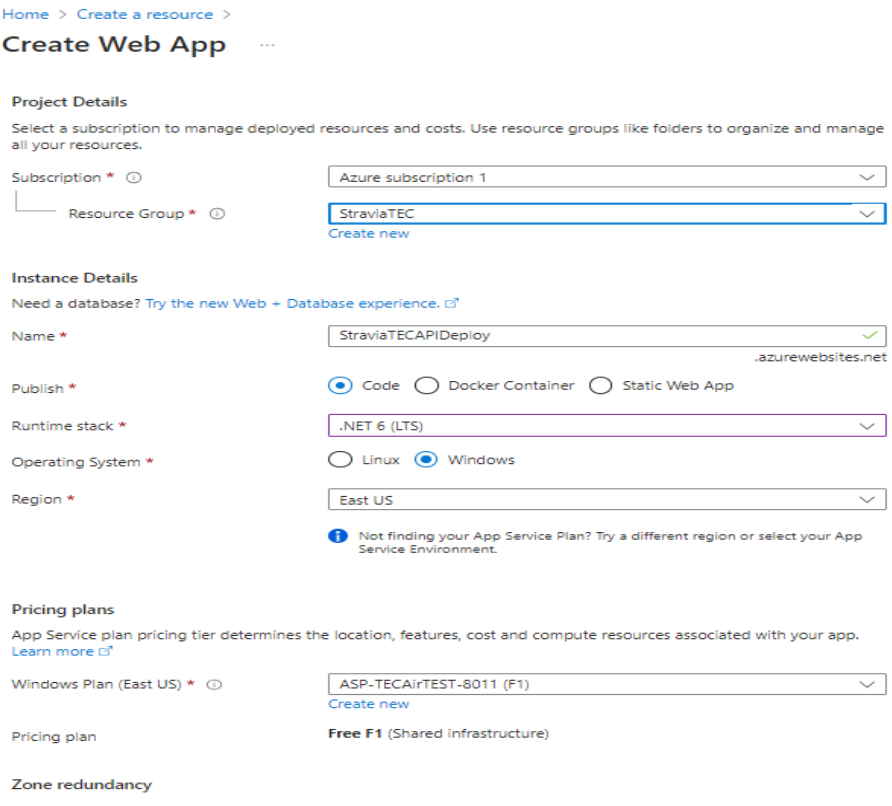
And your preview should look like this:



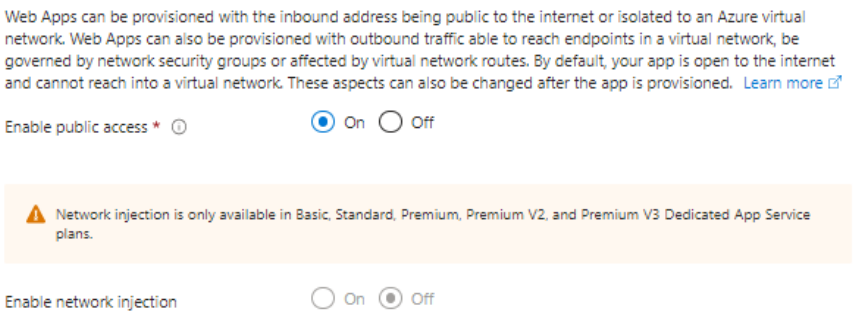
Now you have created and ready the deployment of your database and the next step is to deploy the API with the web app option:



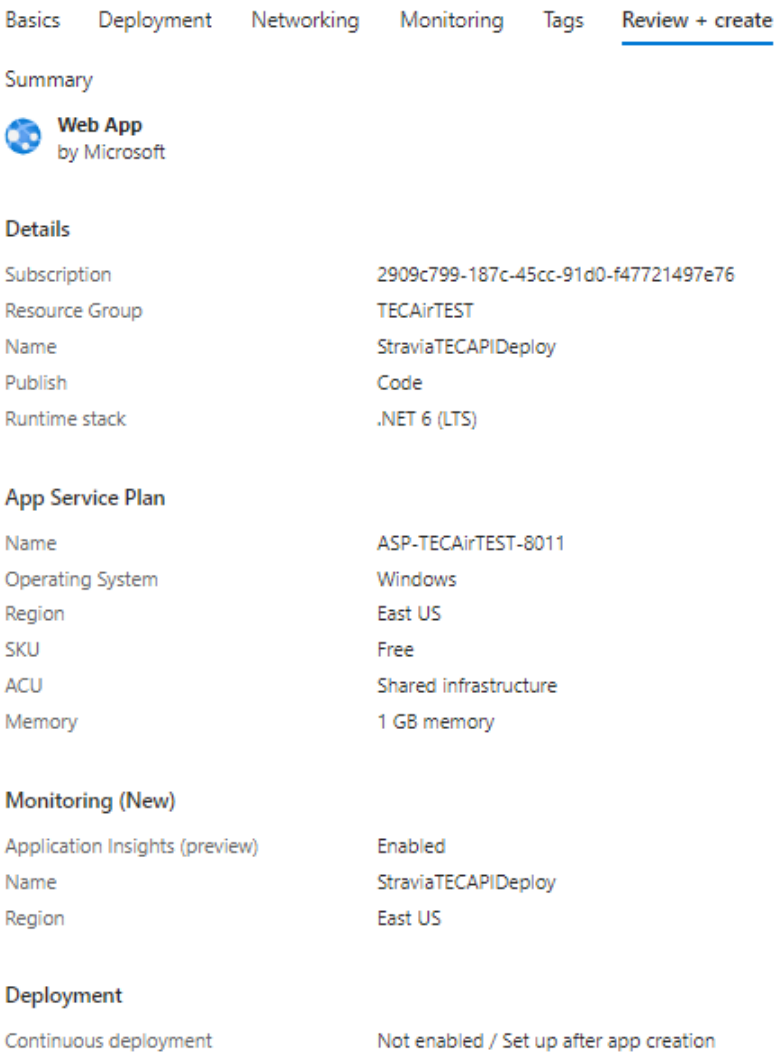
You have to set up the web app:



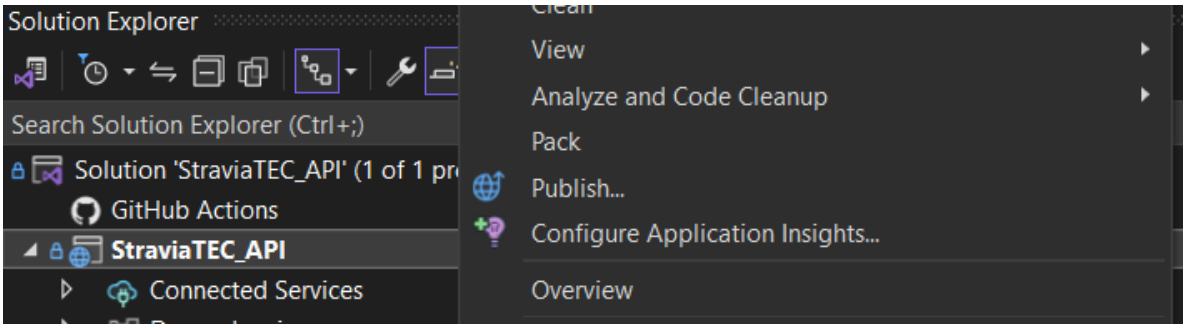
Make sure you set public Access:



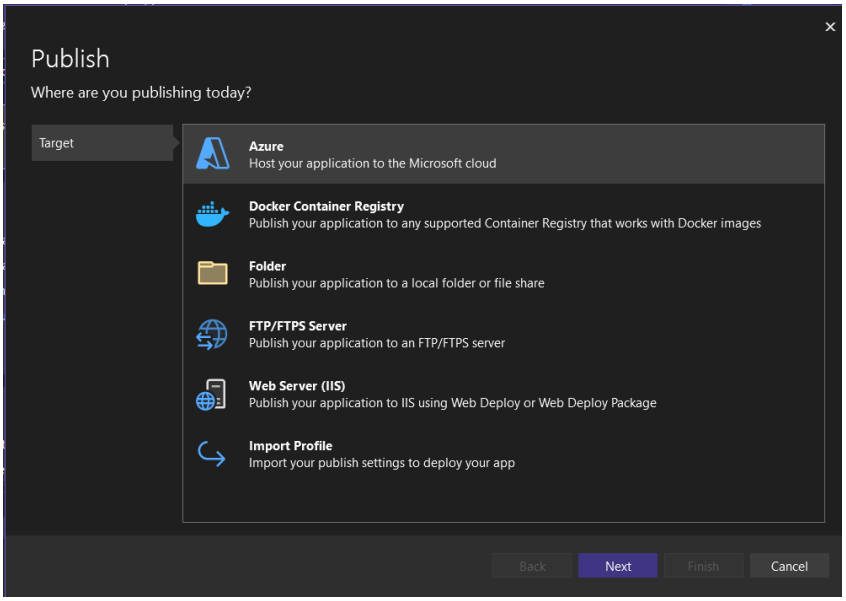
And finally your preview should look like this one:

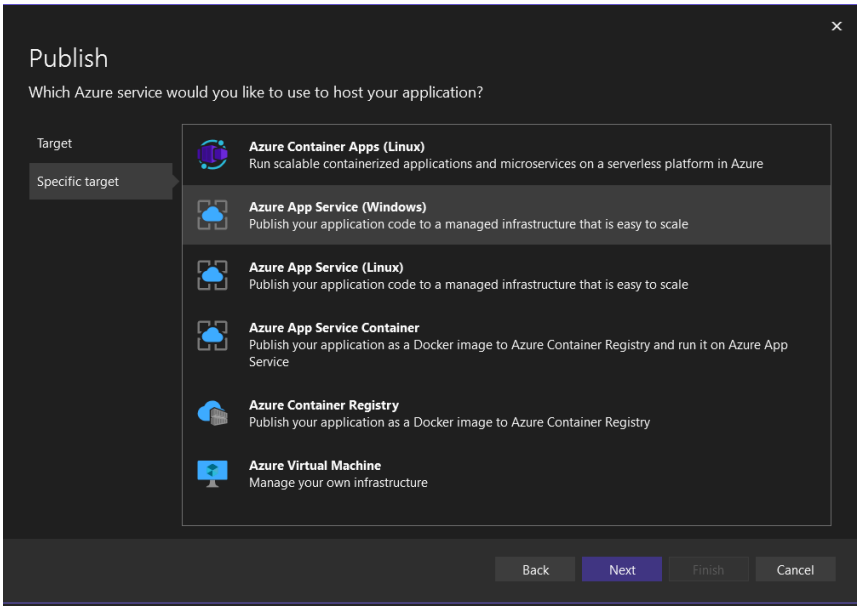


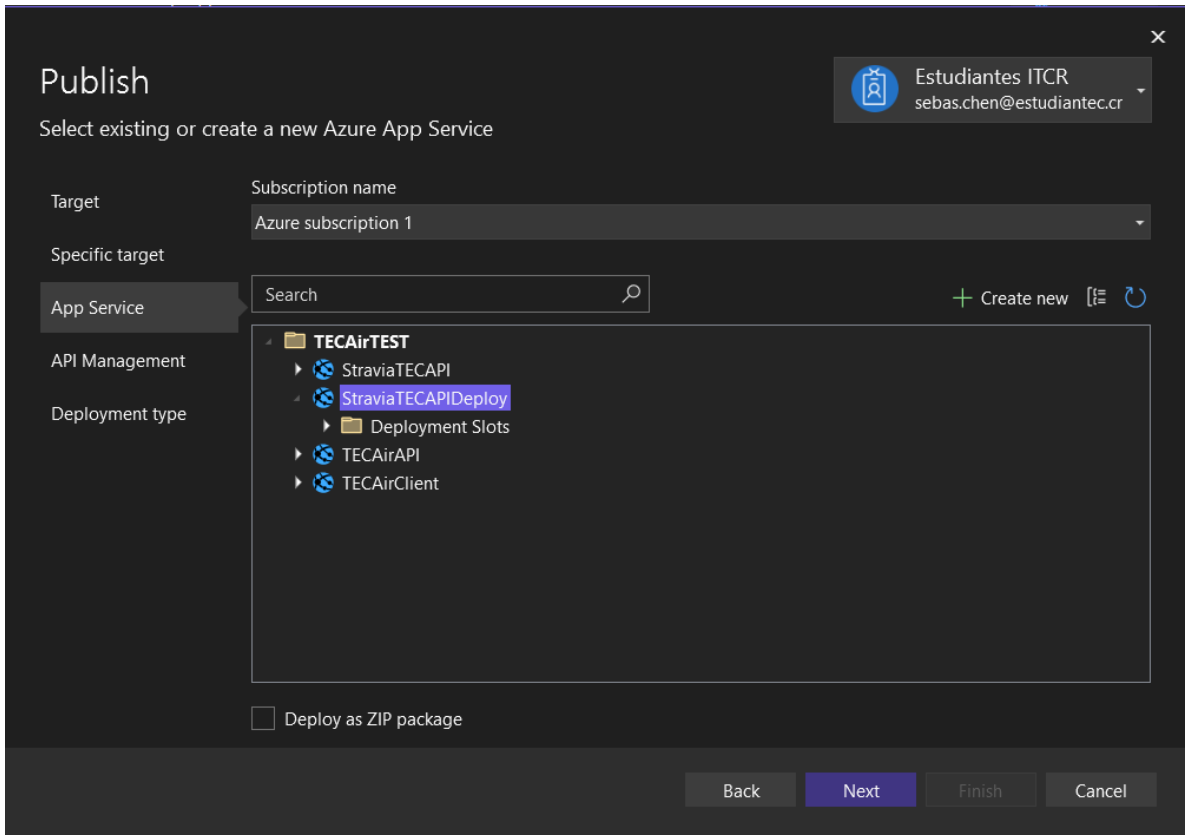
Now you go to your StraviaTEC solution in Visual Studio to publish the application:

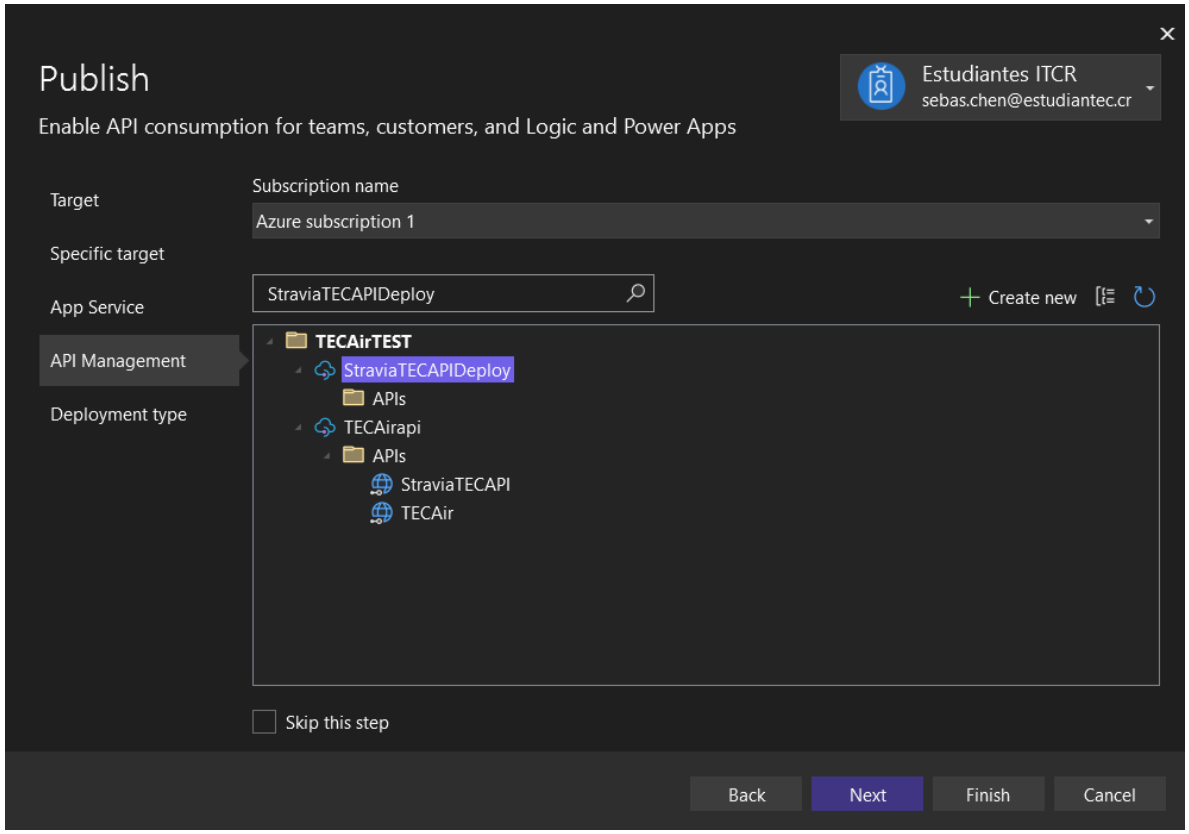


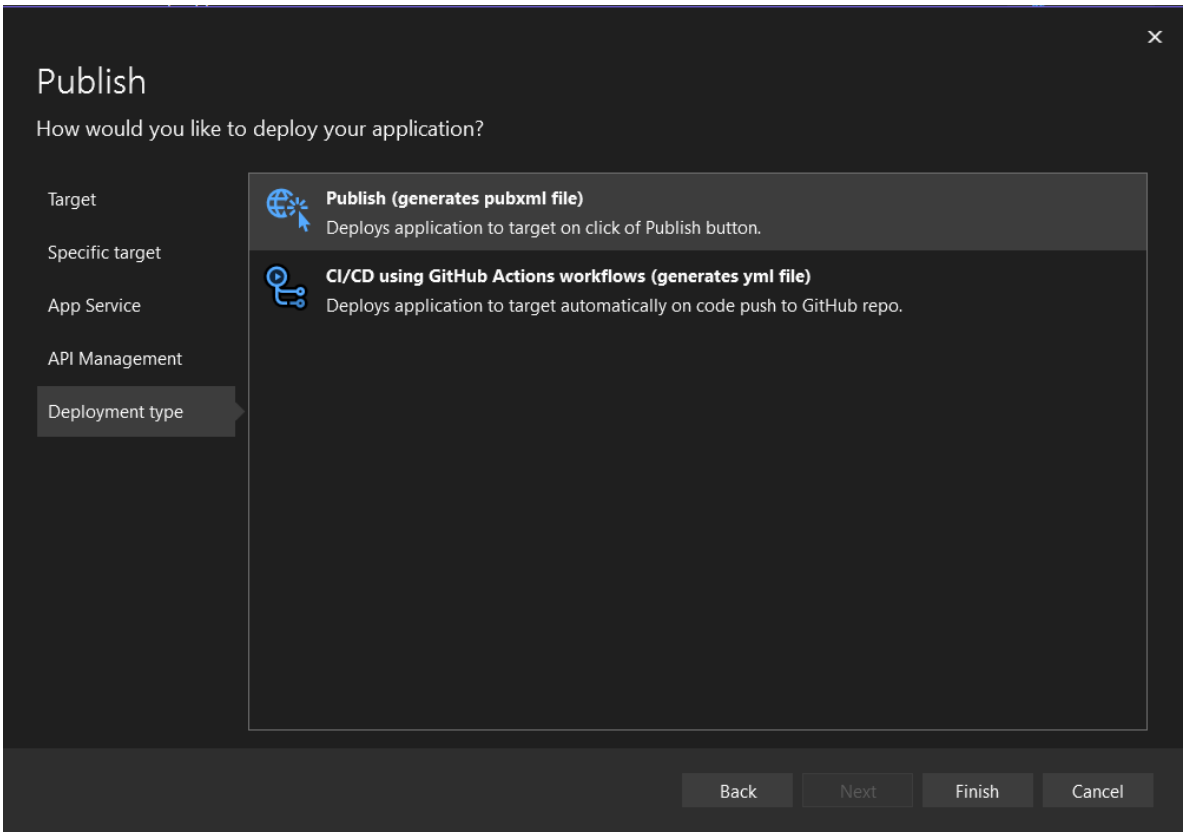
You set up the next configuration:

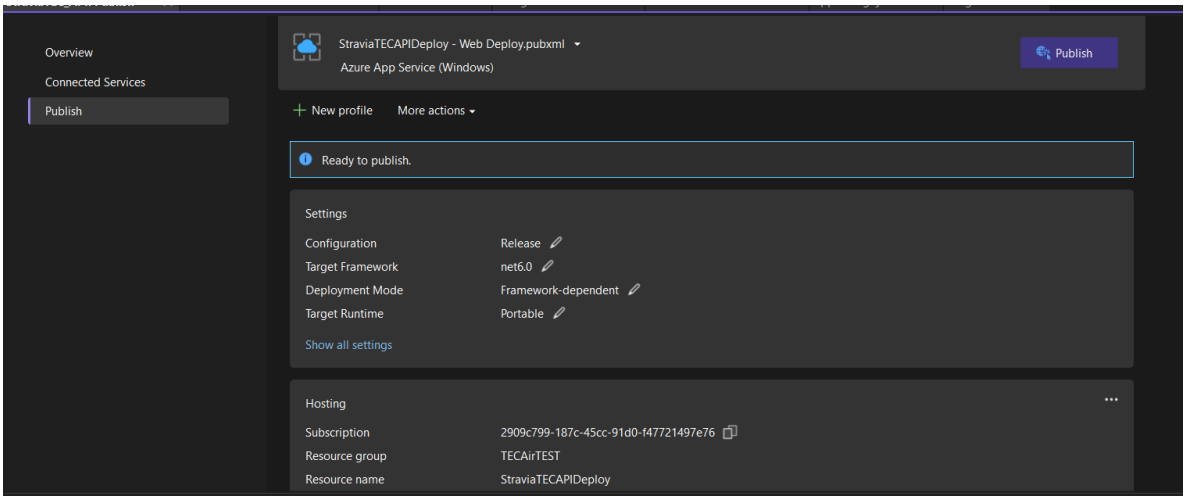




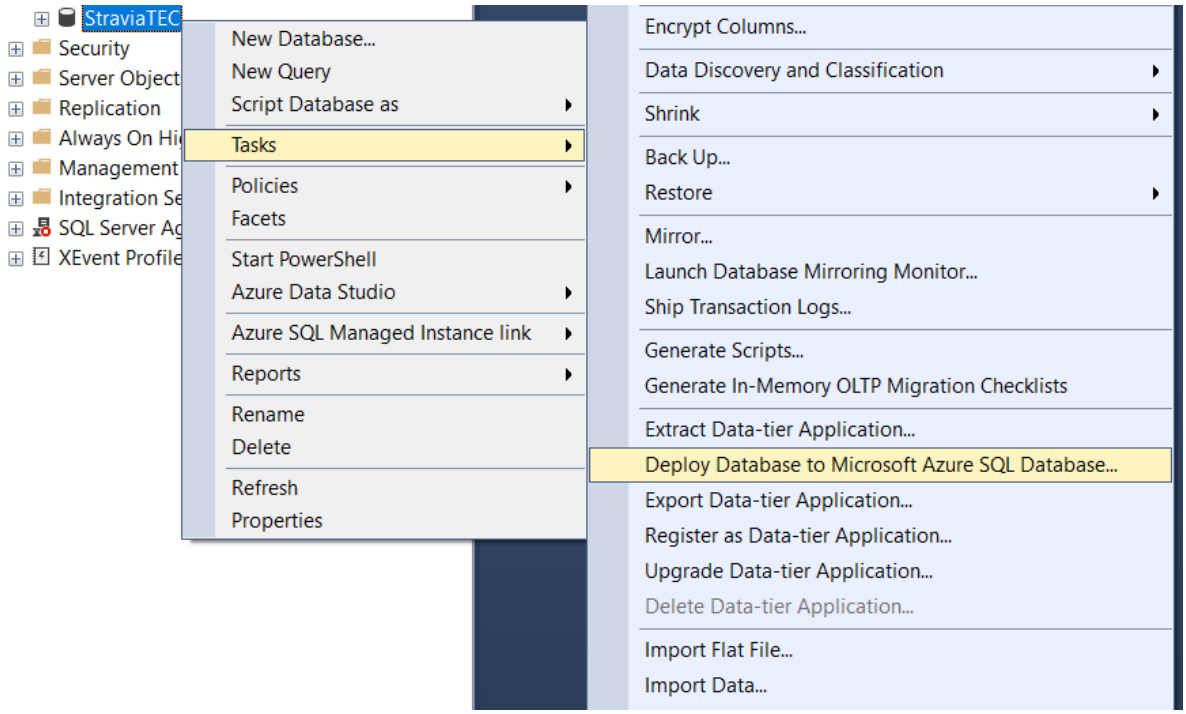

Publish
Select existing or create a new Azure App Service
Estudiantes ITCR
sebas.chen@estudiantec.cr
Target
Specific target
App Service
API Management
Deployment type
Subscription name
Azure subscription 1
Search
Create new
TECAirTEST
StraviaTECAPI
StraviaTECAPIDeploy
Deployment Slots
TECAirAPI
TECAirClient
Deploy as ZIP package
Back
Next
Finish
Cancel

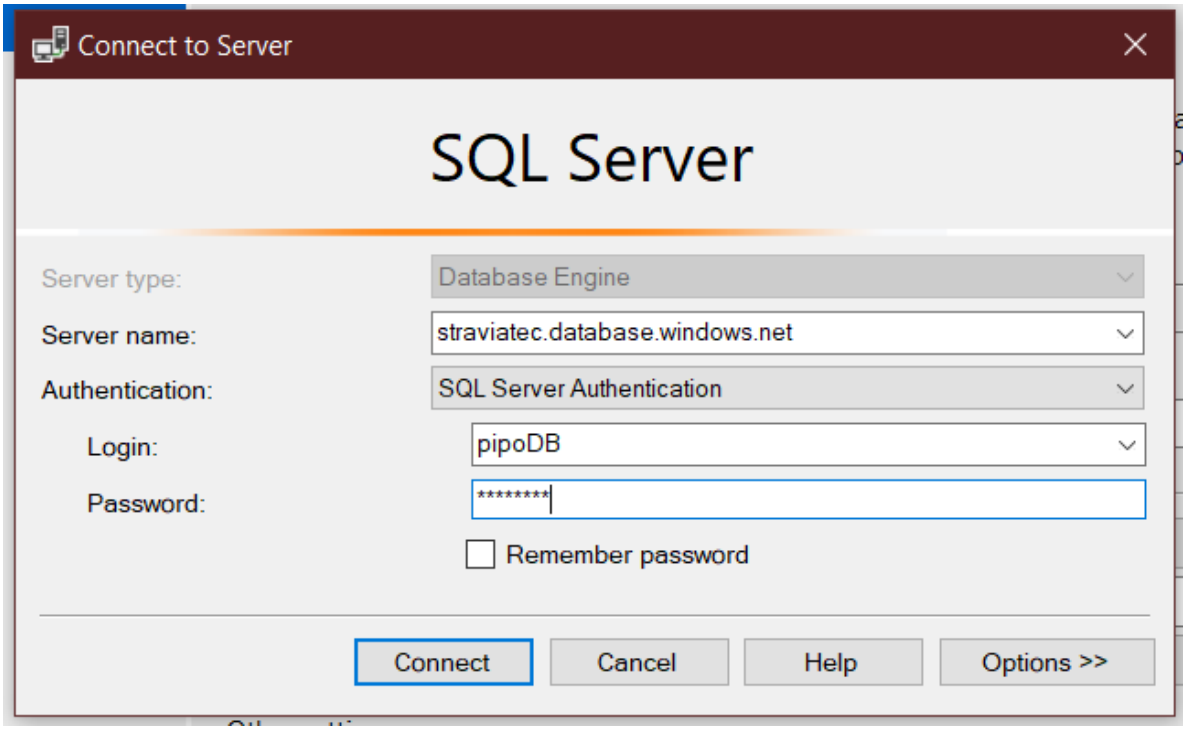

Publish
Enable API consumption for teams, customers, and Logic and Power Apps
Estudiantes ITCR
sebas.chen@estudiantec.cr
Target
Specific target
App Service
API Management
Deployment type
Subscription name
Azure subscription 1
StraviaTECAPIDeploy
Create new
TECAirTEST
StraviaTECAPIDeploy
APIs
TECAirapi
APIs
StraviaTECAPI
TECAir
Skip this step
Back
Next
Finish
Cancel

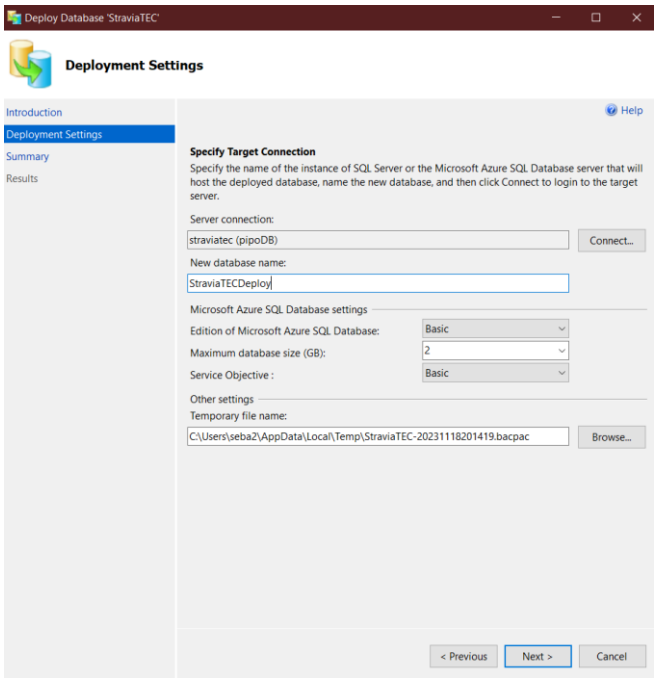

Publish
How would you like to deploy your application?
Target
Specific target
App Service
API Management
Deployment type
Publish (generates pubxml file)
Deploys application to target on click of Publish button.
CI/CD using GitHub Actions workflows (generates yml file)
Deploys application to target automatically on code push to GitHub repo.
Back
Next
Finish
Cancel


Overview
Connected Services
Publish
StraviaTECAPIDeploy - Web Deploy.pubxml
Azure App Service (Windows)
Publish
New profile
More actions
Ready to publish.
Settings
Configuration
Release
Target Framework
net6.0
Deployment Mode
Framework-dependent
Target Runtime
Portable
Show all settings
Hosting
Subscription
2909c799-187c-45cc-91d0-f47721497e76
Resource group
TECAirTEST
Resource name
StraviaTECAPIDeploy

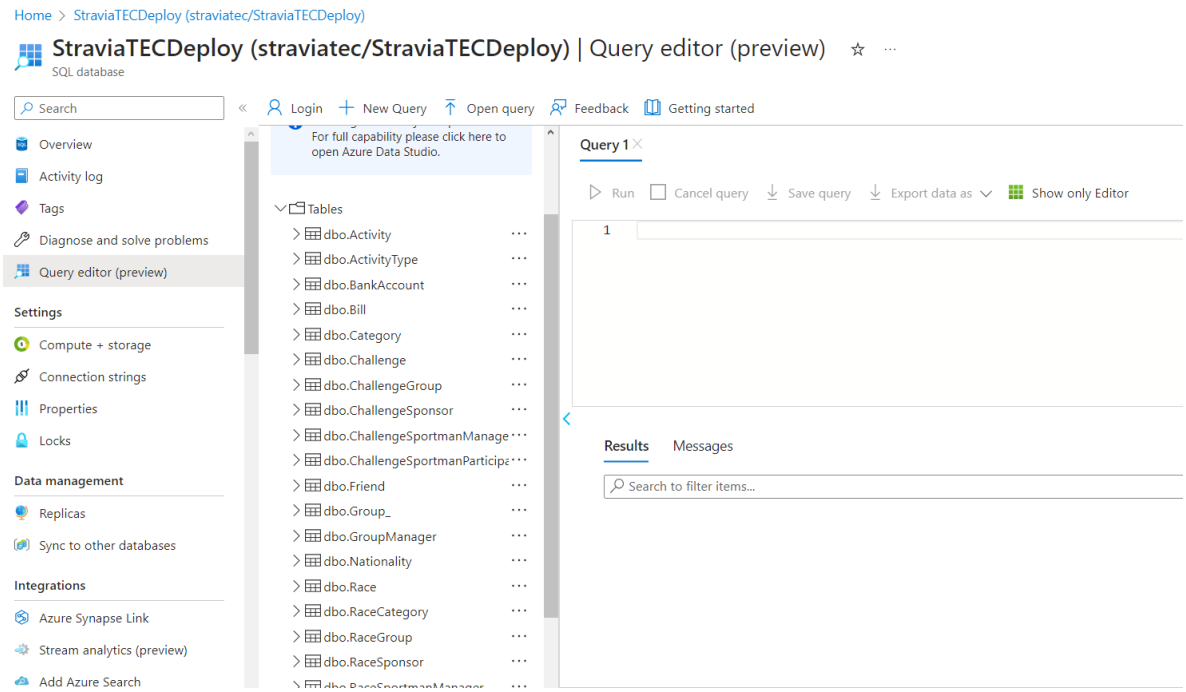
Now you have to open SQL Server and select your database to deploy it following the next steps:



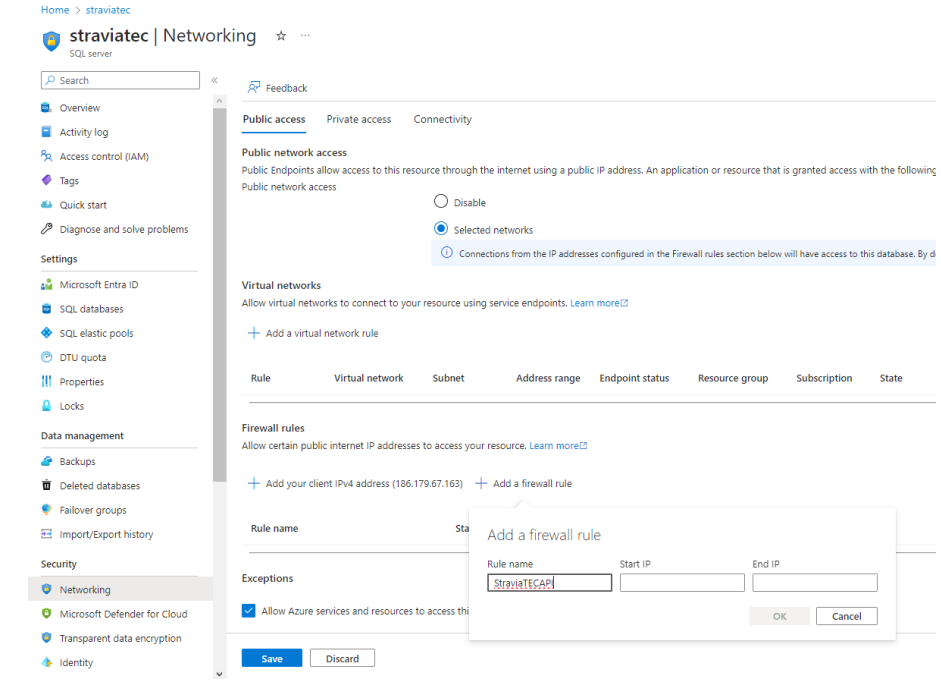


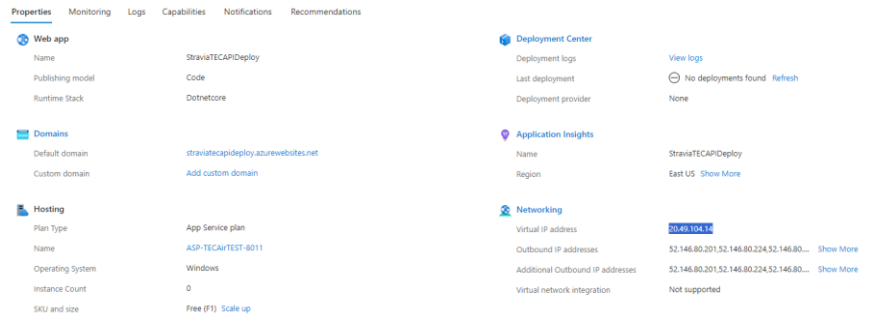


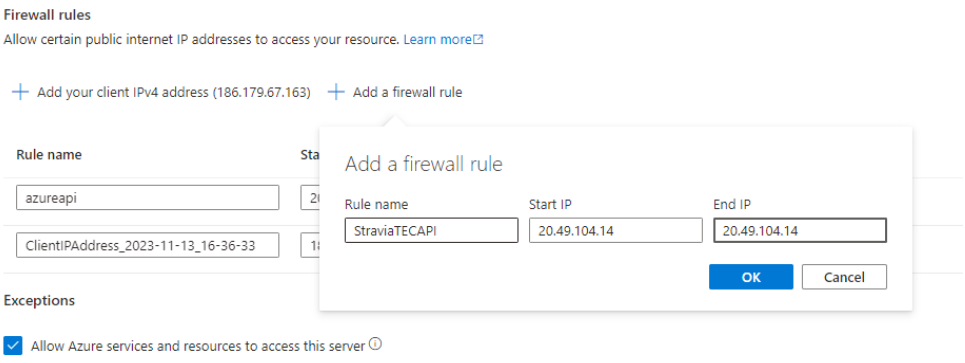
Now you can make the deploy in the Azzure web page:



You have configure the access to the database:





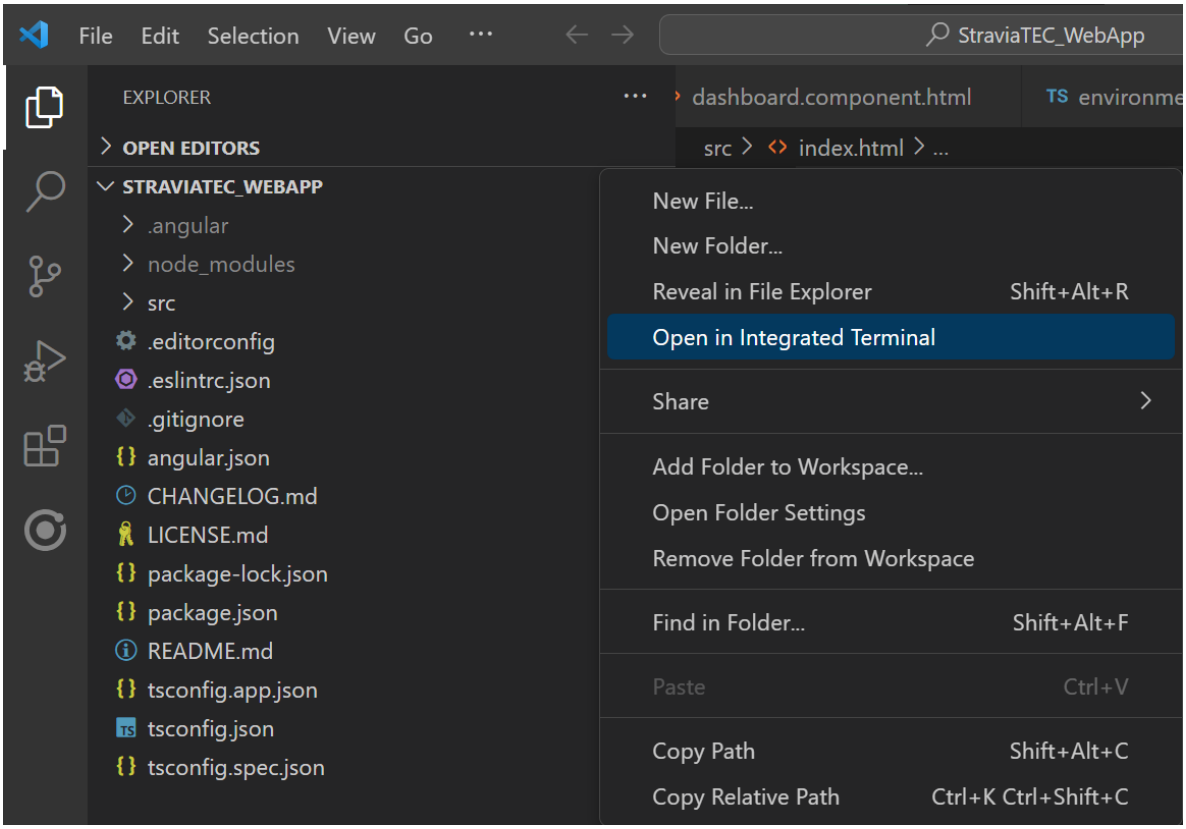


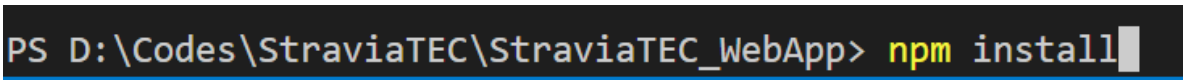
And that's it, now you have just deployed all the StraviaTEC BackEnd.

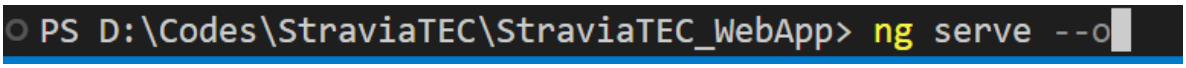
FrontEnd Local Execution

Execute the web page is really simple, first of all you have to clone the repository an go to the StraviaTEC_WebApp folder and open it with Visual Studio Code. The open a terminal in that location a run the following command lines

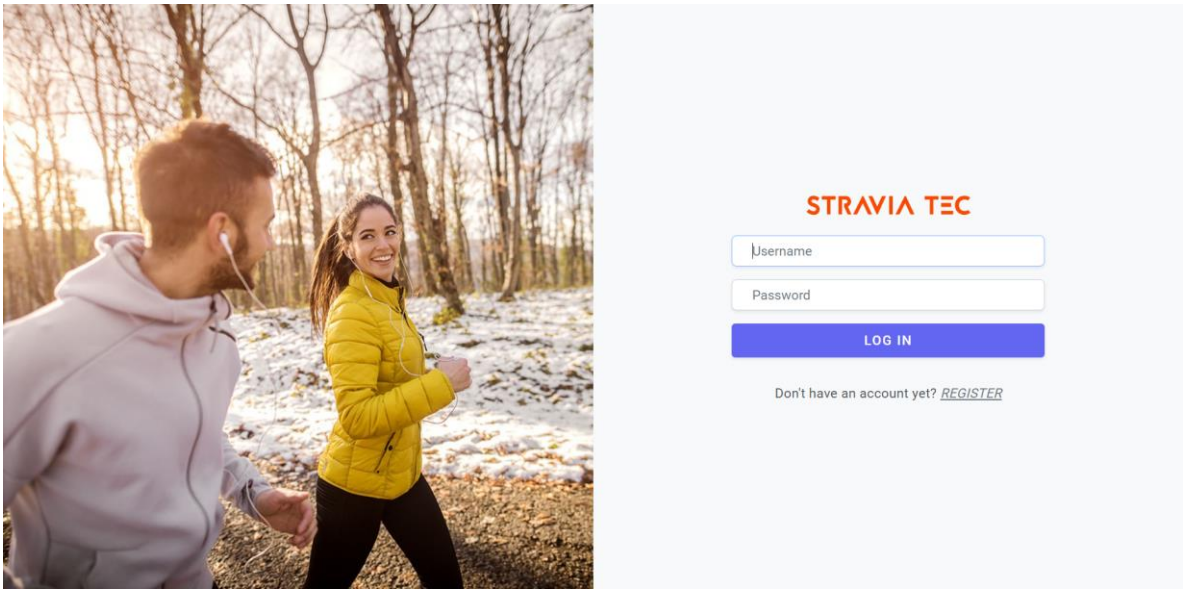
- npm install
- ng serve –o







And that's it, once you do this you should see the web application opened in your explorer, like this:

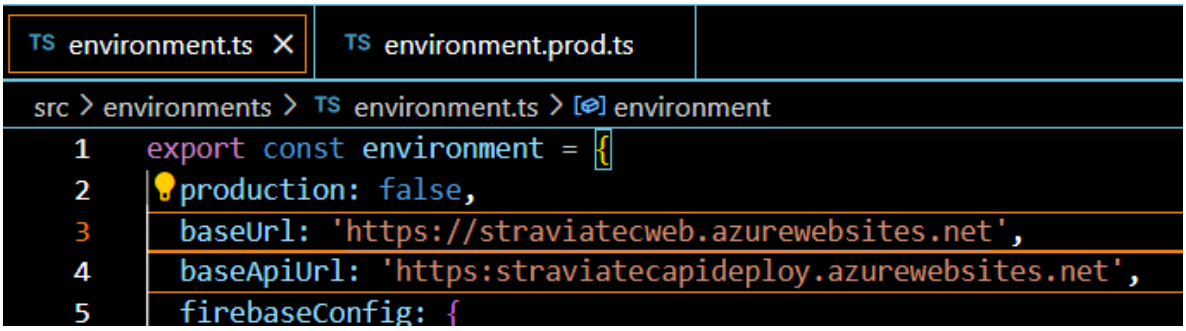


FrontEnd Global Deployment

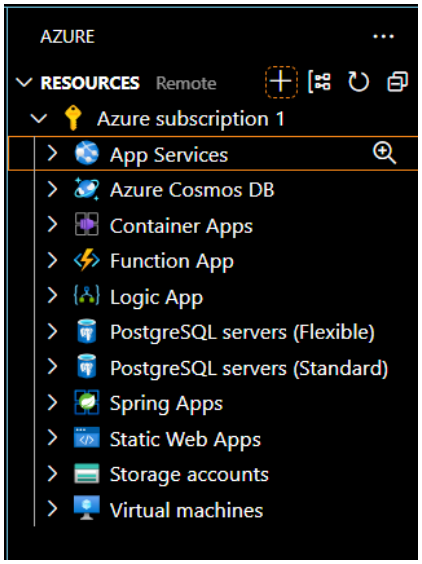
To deploy the StraviaTEC web page with Azzure the first step will be to install the Azzure extension on Visual Studio Code as shown below:

Then you click on the Azzure icon and login with your account:

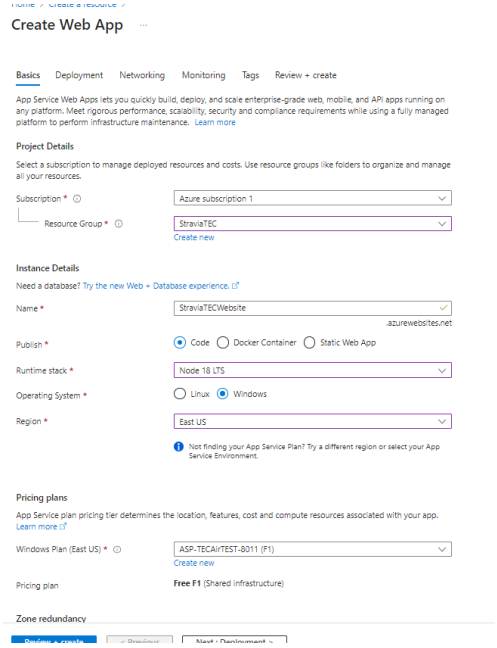
Now you have to make sure to configure you environments with the API url you got from the API Global Deployment and run **ng build**:



Once you are logged in, you have to go to the Azzure page to create the web application:



Then you select the project to do the deployment, it will take a while loading and once it is done you will have the next page to configure the web app creation:



Once you have configured the creation page you and press the blue button, you will have to wait a while but the you finally will have the StraviaTEC web page deployed and anyone else will be able to join to your page from anywhere like any other website.

Mobile App

To install the mobile app you just have to go to the releases in the Github repository and download the mobile app for Android. Once you have it downloaded, allow external installations on you cellphone and touch to the .apk file to proceed with the automatic installation. Here is the link to the release.