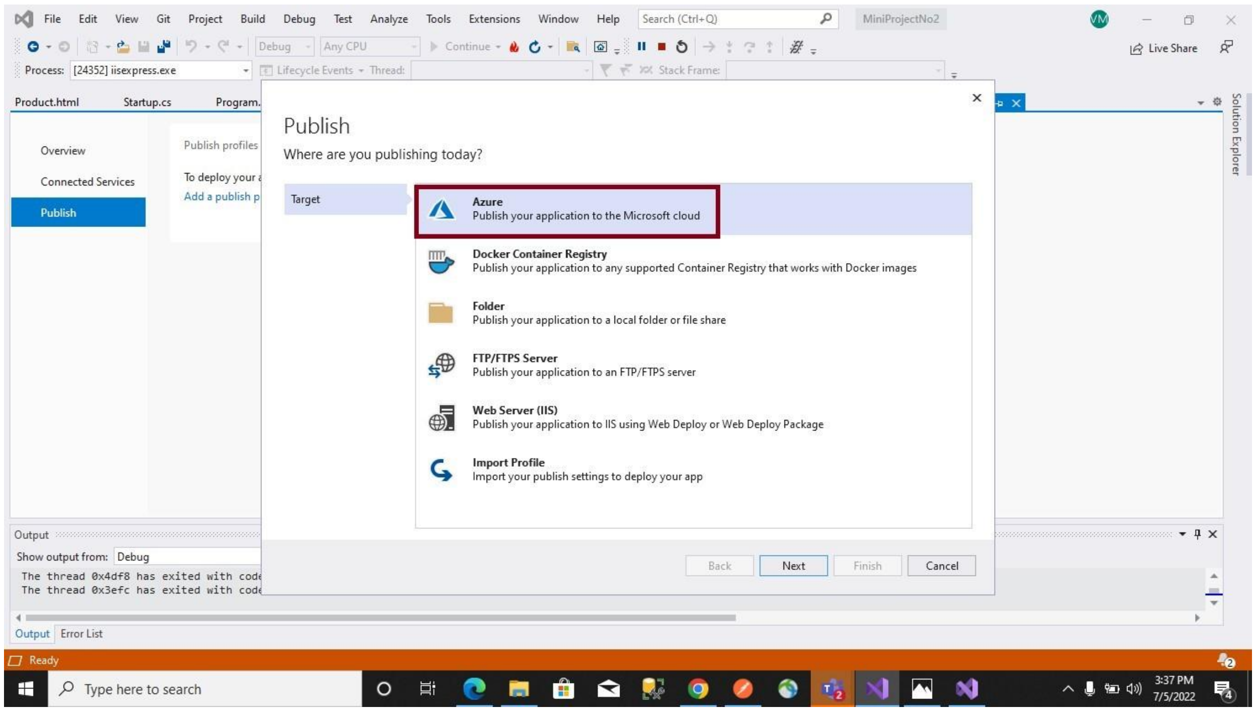
Final Project

How To Publish Your Web App?

To publish your web app, you must first create and configure a new App Service that you can publish your app to.
As part of setting up the App Service, you'll create
A new resource group to contain all of the Azure resources for the service.
A new Hosting Plan that specifies the location, size, and features of the web server farm that hosts your app.
Follow these steps to create your App Service resources and publish your project.

1. **In Solution Explorer, right-click the MyFirstAzureWebApp project and select Publish.**

2. In **Publish**, select **Azure** and then **Next**.



Publish

Where are you publishing today?

Target

Azure
Publish your application to the Microsoft cloud

Docker Container Registry
Publish your application to any supported Container Registry that works with Docker images

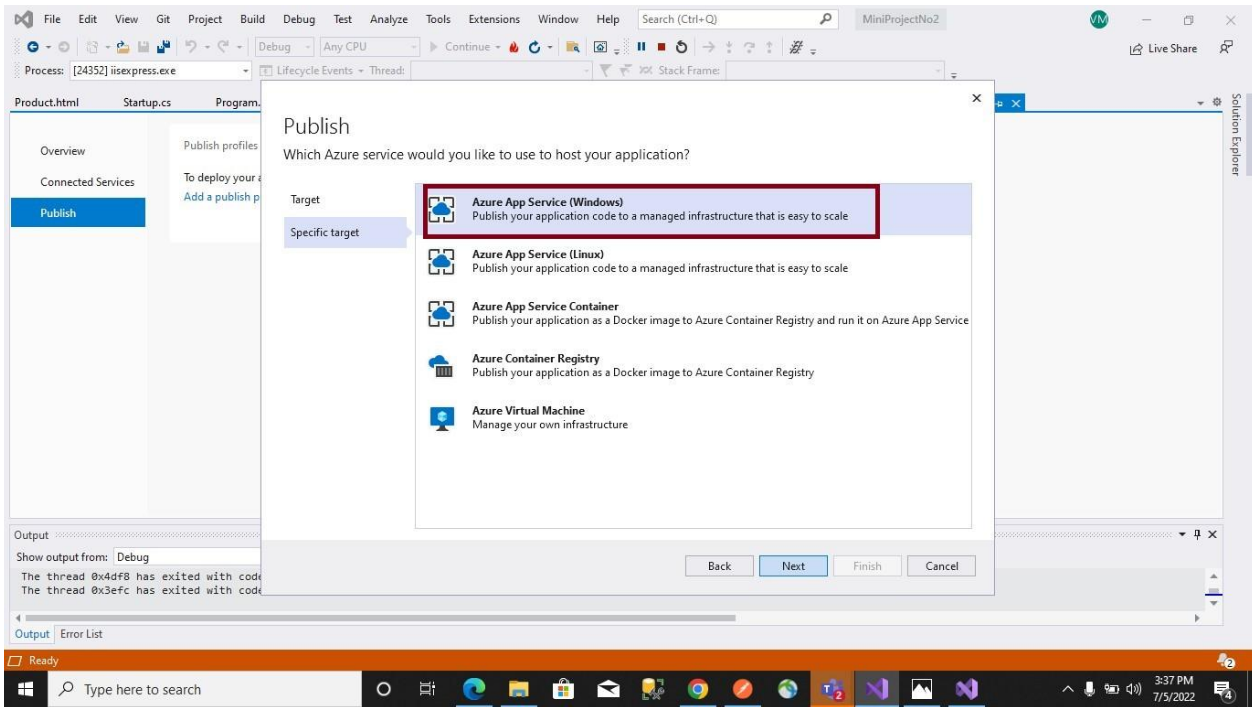
Folder
Publish your application to a local folder or file share

FTP/FTPS Server
Publish your application to an FTP/FTPS server

Web Server (IIS)
Publish your application to IIS using Web Deploy or Web Deploy Package

Import Profile
Import your publish settings to deploy your app

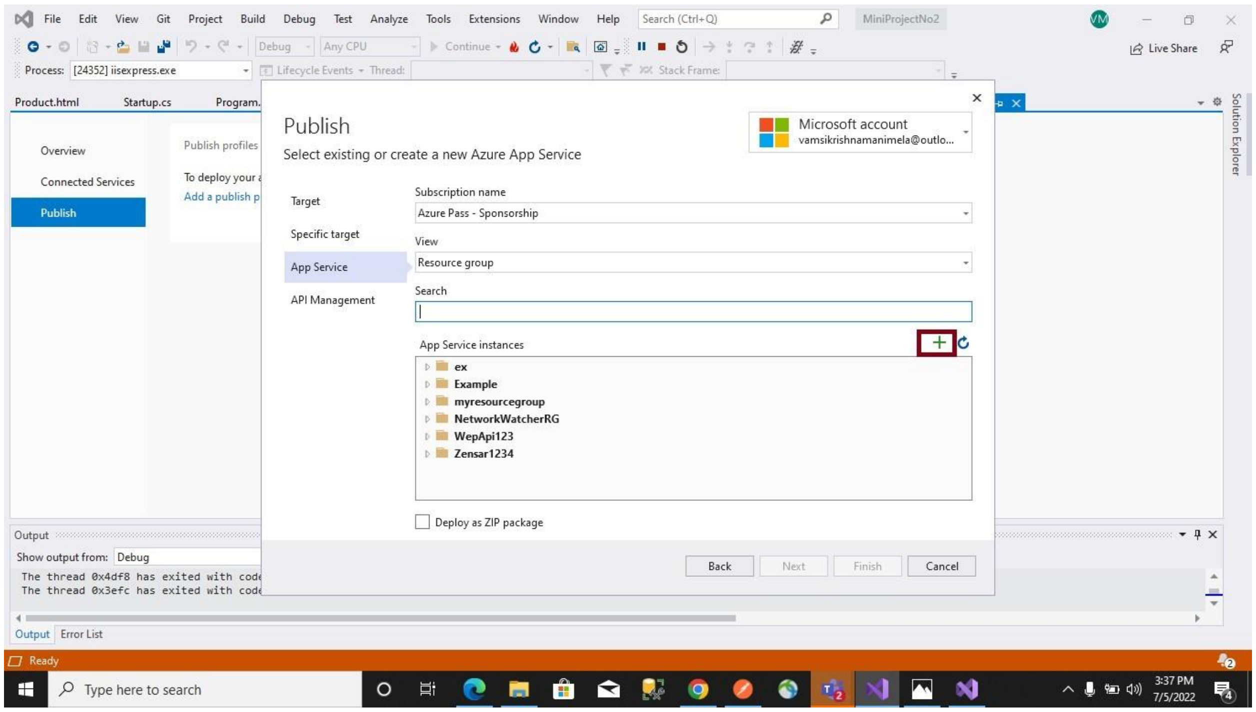
3. **Choose the Specific target, either Azure App Service (Linux) or Azure App Service (Windows). Then, select Next.**


Publish
Which Azure service would you like to use to host your application?
Target
Specific target
Azure App Service (Windows)
Publish your application code to a managed infrastructure that is easy to scale
Azure App Service (Linux)
Publish your application code to a managed infrastructure that is easy to scale
Azure App Service Container
Publish your application as a Docker image to Azure Container Registry and run it on Azure App Service
Azure Container Registry
Publish your application as a Docker image to Azure Container Registry
Azure Virtual Machine
Manage your own infrastructure
Back
Next
Finish
Cancel

```
The thread 0x4df8 has exited with code
The thread 0x3efc has exited with code
```

Your options depend on whether you're signed in to Azure already and whether you have a Visual Studio account linked to an Azure account.

4. **Select either Add an account or Sign in to sign in to your Azure subscription. If you're already signed in, select the account you want.**
5. **To the right of App Service instances, select +.**



Publish

Select existing or create a new Azure App Service

Microsoft account
vamsikrishnamanimela@outlo...

Subscription name: Azure Pass - Sponsorship

View: Resource group

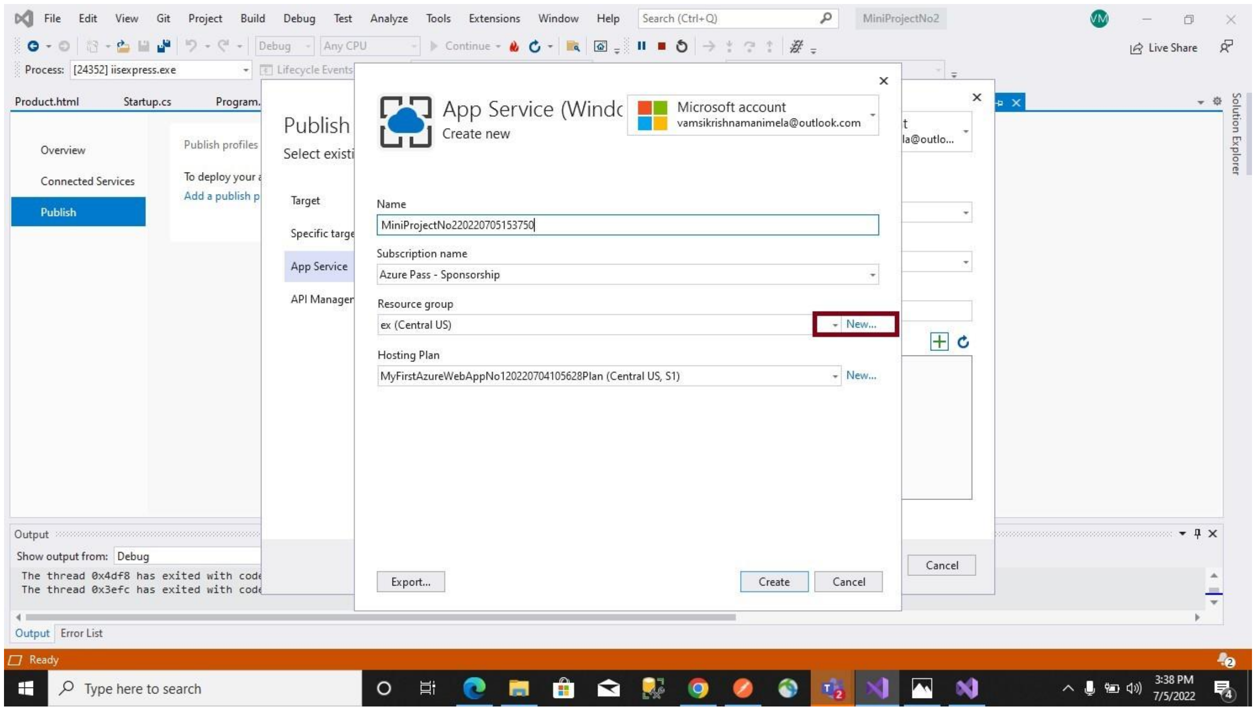
Search

App Service instances
- ex
- Example
- myresourcegroup
- NetworkWatcherRG
- WepApi123
- Zensar1234

Deploy as ZIP package

```
The thread 0x4df8 has exited with code
The thread 0x3efc has exited with code
```

6. **For Resource group, select New. In New resource group name**



Name: MiniProjectNo220220705153750

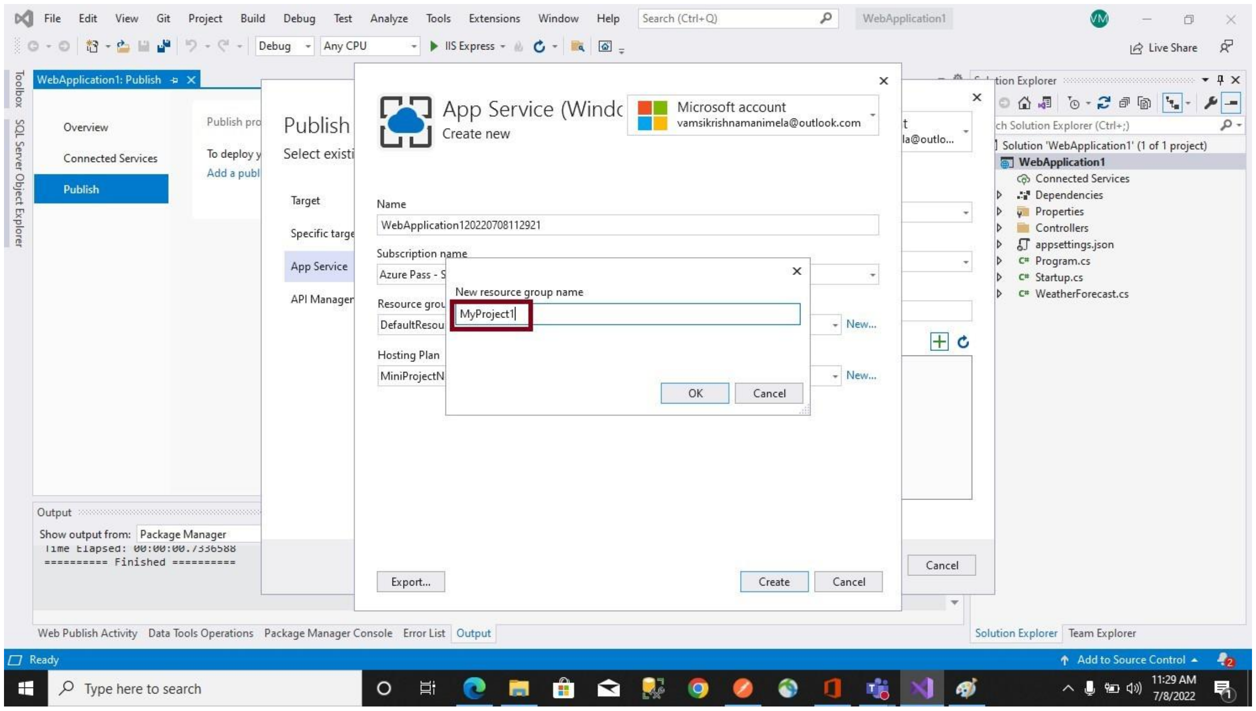
Subscription name: Azure Pass - Sponsorship

Resource group: ex (Central US)

Hosting Plan: MyFirstAzureWebAppNo120220704105628Plan (Central US, S1)

```
The thread 0x4df8 has exited with code
The thread 0x3efc has exited with code
```

7. **Enter Like MyResourceGroup and select OK.**

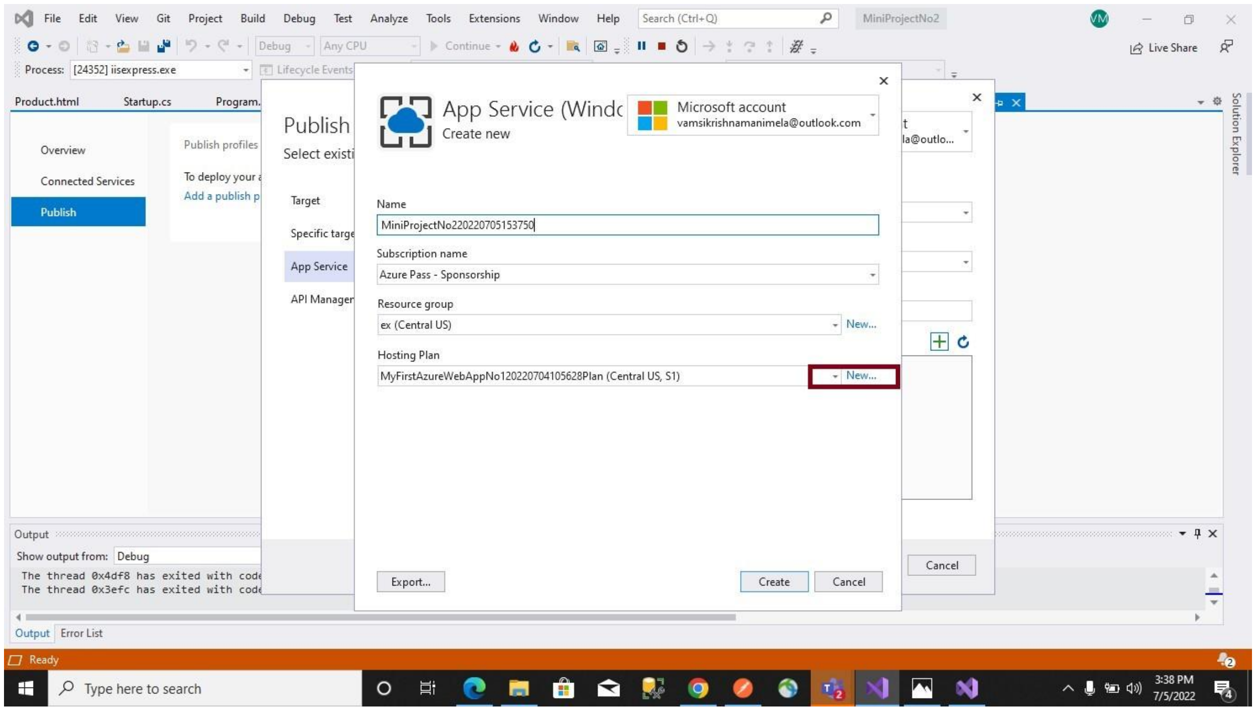


Name: WebApplication120220708112921

New resource group name: MyProject1

```
Time Elapsed: 00:00:00.7336588
========== Finished ==========
```

8. **For Hosting Plan, select New.**



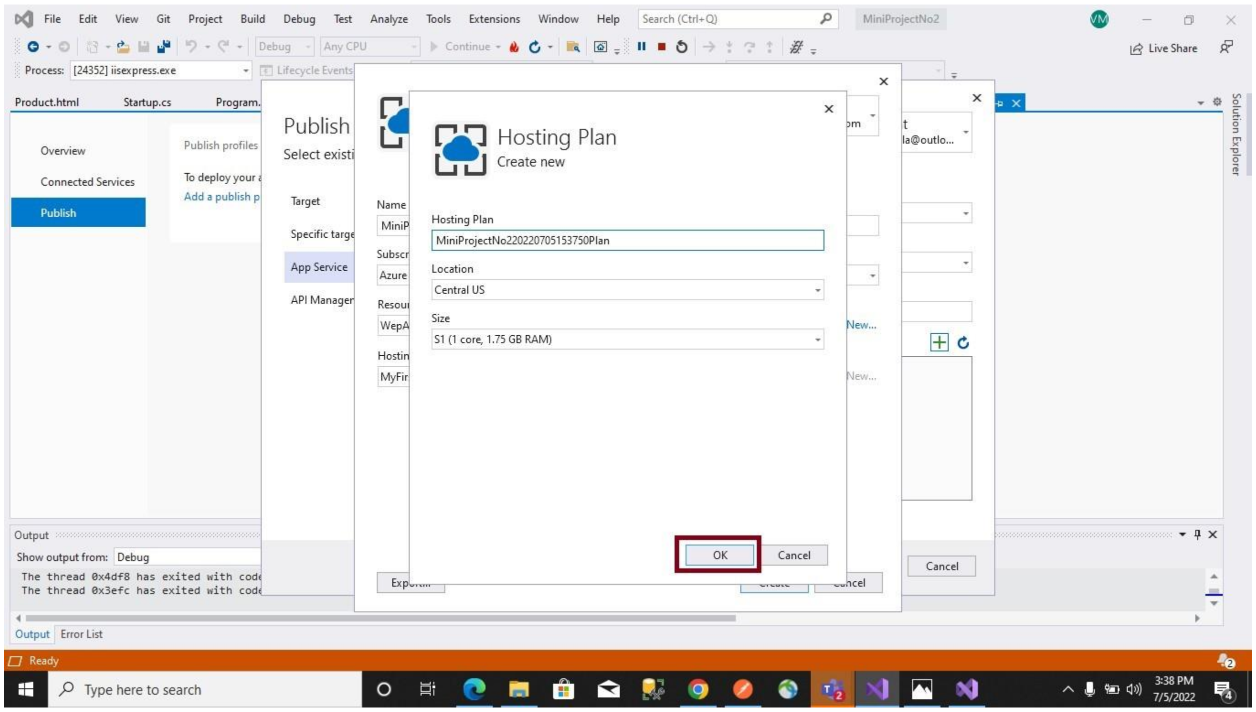
Name: MiniProjectNo220220705153750

Subscription name: Azure Pass - Sponsorship

Resource group: ex (Central US)

Hosting Plan: MyFirstAzureWebAppNo120220704105628Plan (Central US, S1)

9. **In the Hosting Plan: Create new dialog, enter the values specified in the following table.**

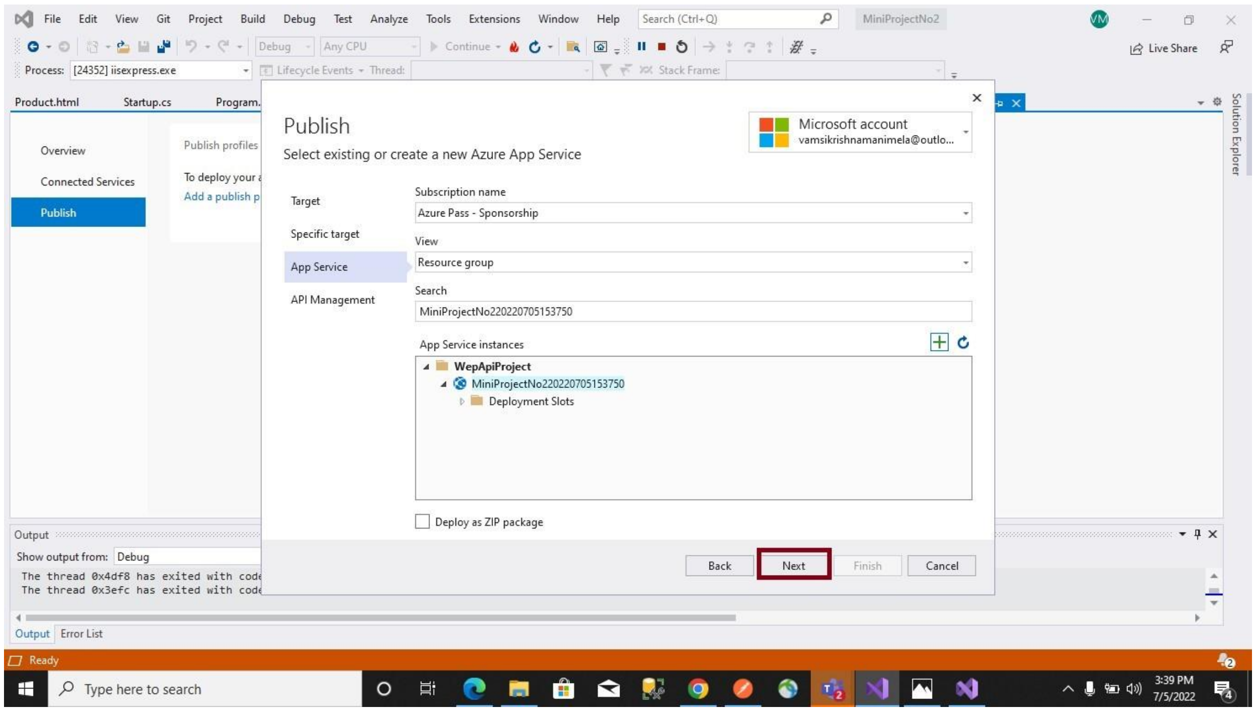


Hosting Plan: MiniProjectNo220220705153750Plan

Location: Central US

Size: S1 (1 core, 1.75 GB RAM)

10. **Select Create to Create .**



Publish

Select existing or create a new Azure App Service

Microsoft account
vamsikrishnamanimela@outlo...

Subscription name: Azure Pass - Sponsorship

View: Resource group

Search: MiniProjectNo220220705153750

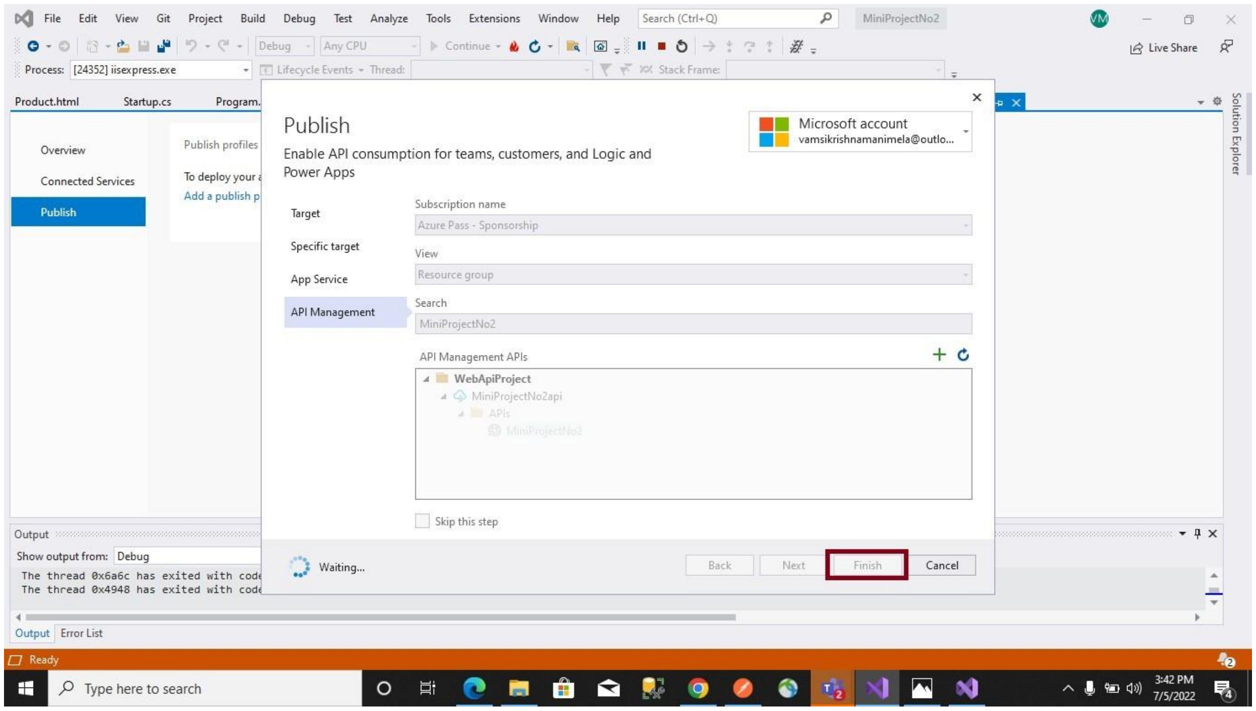
App Service instances

- WepApiProject
  - MiniProjectNo220220705153750
    - Deployment Slots

Deploy as ZIP package

```
The thread 0x4df8 has exited with code
The thread 0x3efc has exited with code
```

11. **Click On Finish Button .**



Publish

Enable API consumption for teams, customers, and Logic and Power Apps

Microsoft account
vamsikrishnamanimela@outlo...

Subscription name: Azure Pass - Sponsorship

View: Resource group

Search: MiniProjectNo2

API Management APIs

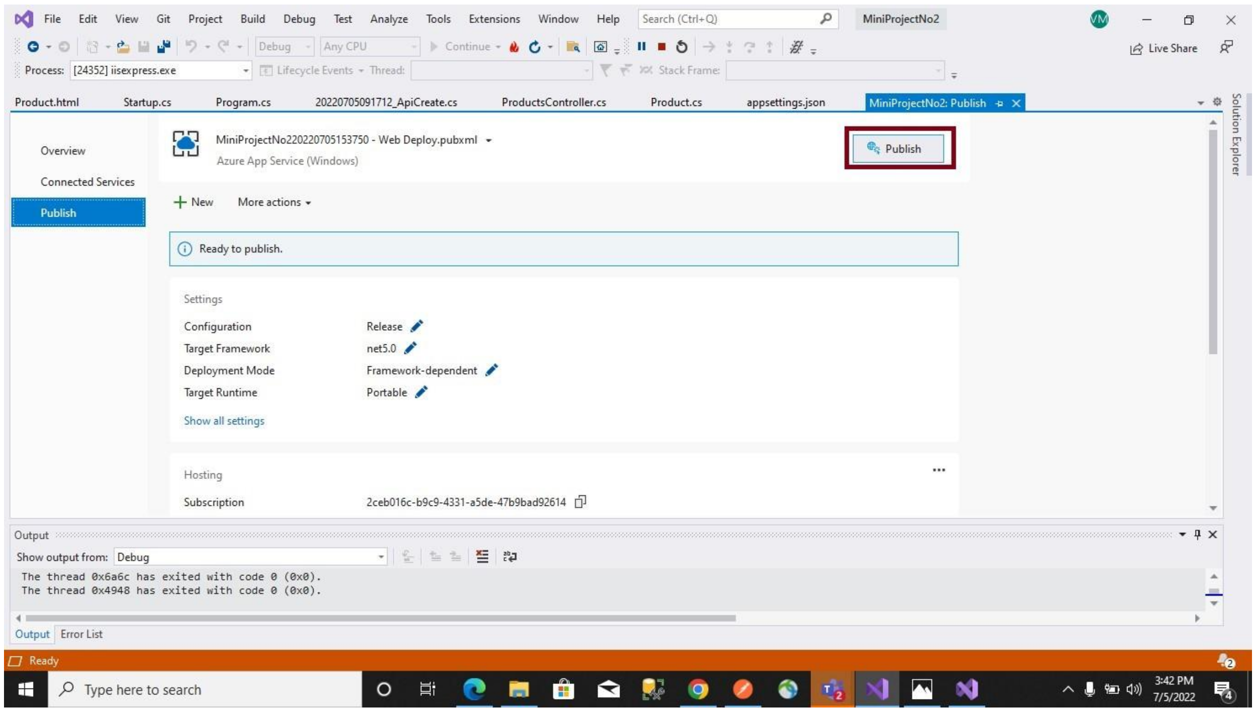
- WebApiProject
  - MiniProjectNo2api
    - APIs
      - MiniProjectNo2

Skip this step

Waiting...

```
The thread 0x6a6c has exited with code
The thread 0x4948 has exited with code
```

12. **Here We Have To Publish Your Project.**



Process: [24352] iisexpress.exe

Product.html | Startup.cs | Program.cs | 20220705091712_ApiCreate.cs | ProductsController.cs | Product.cs | appsettings.json | MiniProjectNo2: Publish

MiniProjectNo220220705153750 - Web Deploy.pubxml
Azure App Service (Windows)

Ready to publish.

Settings

Configuration	Release
Target Framework	net5.0
Deployment Mode	Framework-dependent
Target Runtime	Portable

Show all settings

Hosting

Subscription 2ceb016c-b9c9-4331-a5de-47b9bad92614

Output

Show output from: Debug

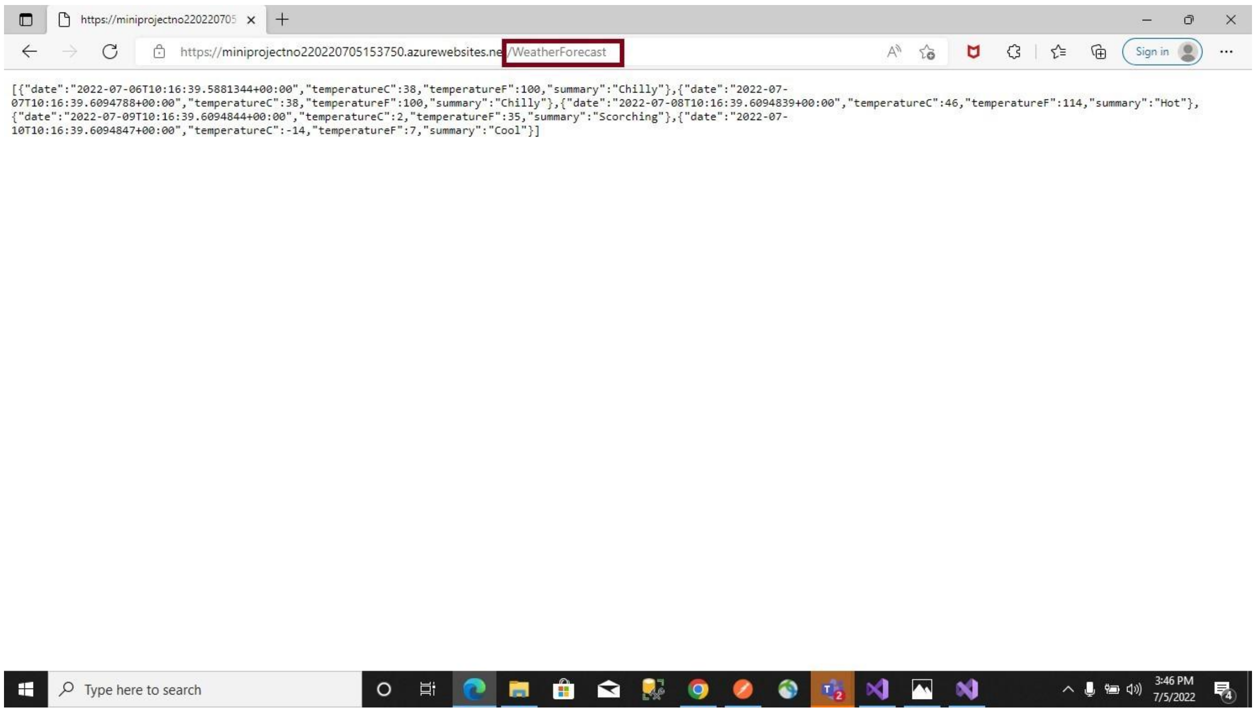
```
The thread 0x6a6c has exited with code 0 (0x0).
The thread 0x4948 has exited with code 0 (0x0).
```

Output Error List

Ready

Type here to search 3:42 PM 7/5/2022

13. **Finally We Got Home Page Our Project Is Deployed In The Home We Have to add Weather Forecast**



https://miniprojectno220220705153750.azurewebsites.net/WeatherForecast

```
[{"date":"2022-07-06T10:16:39.5881344+00:00","temperatureC":38,"temperatureF":100,"summary":"Chilly"},{"date":"2022-07-
07T10:16:39.6094788+00:00","temperatureC":38,"temperatureF":100,"summary":"Chilly"},{"date":"2022-07-08T10:16:39.6094839+00:00","temperatureC":46,"temperatureF":114,"summary":"Hot"},
{"date":"2022-07-09T10:16:39.6094844+00:00","temperatureC":2,"temperatureF":35,"summary":"Scorching"},{"date":"2022-07-
10T10:16:39.6094847+00:00","temperatureC":-14,"temperatureF":7,"summary":"Cool"}]
```

Type here to search 3:46 PM 7/5/2022

2)Configure Scale Out By Adding Rules For Custom Scaling ?

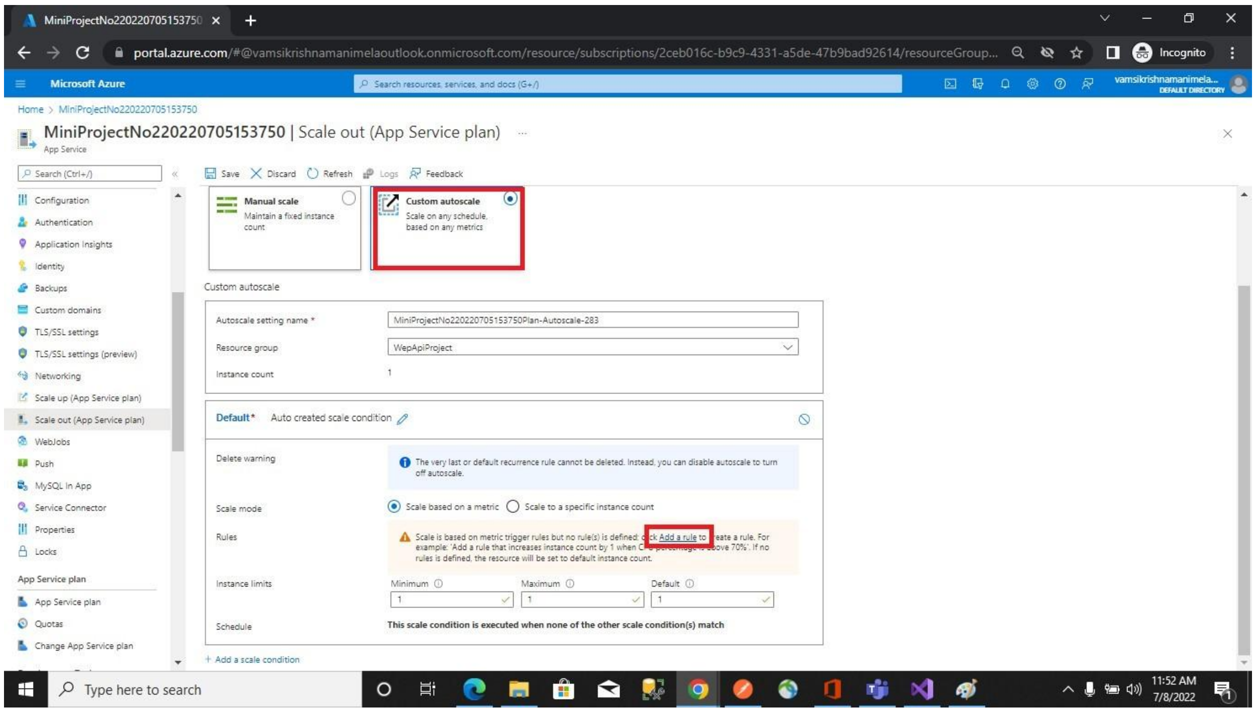
A scale out operation is the equivalent of creating multiple copies of your web site and adding a load balancer to distribute the demand between them. When you scale out a web site in Windows Azure Web Sites there is no need to configure load balancing separately since this is already provided by the platform

Open the Azure portal and select Resource groups from the menu on the left-hand side of the dashboard.

1. **Click On ScaleOut Option**

Choose **Scaling** from the menu on the left-hand side of the scale set window. Select the button to **Custom autoscale.**

2. Select the option to **Add a rule.**



MiniProjectNo220220705153750 | Scale out (App Service plan)

Manual scale: Maintain a fixed instance count ( )
Custom autoscale: Scale on any schedule, based on any metrics (●)

Custom autoscale

Autoscale setting name *	MiniProjectNo220220705153750Plan-Autoscale-283
Resource group	WepApiProject
Instance count	1

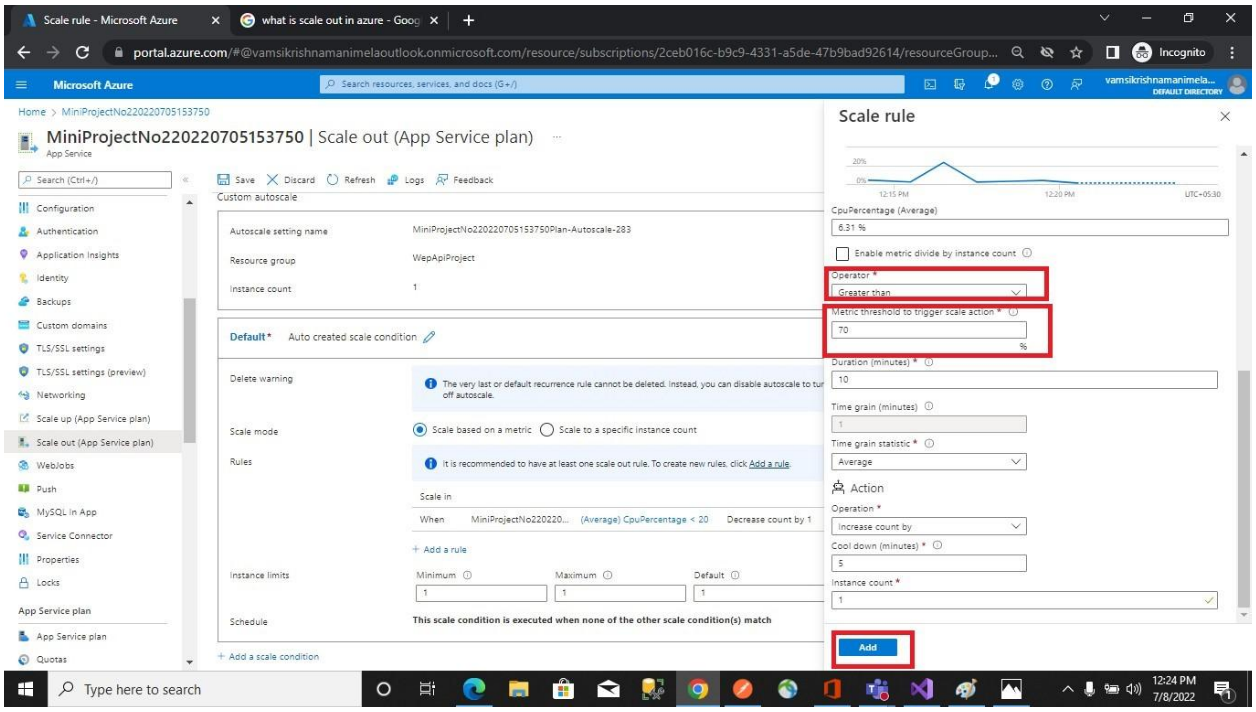
Default* Auto created scale condition

Delete warning	The very last or default recurrence rule cannot be deleted. Instead, you can disable autoscale to turn off autoscale.
Scale mode	[✓ Scale based on a metric] Scale to a specific instance count
Rules	Scale is based on metric trigger rules but no rule(s) is defined; click Add a rule to create a rule. For example: 'Add a rule that increases instance count by 1 when CPU percentage is above 70%'. If no rules is defined, the resource will be set to default instance count.
Instance limits	Minimum 1, Maximum 1, Default 1
Schedule	This scale condition is executed when none of the other scale condition(s) match

+ Add a scale condition

Let's create a rule that increases the number of VM instances in a scale set when the average CPU load is greater than 70% over a 10-minute period.

3. **To create the rule, select Add**



MiniProjectNo220220705153750 | Scale out (App Service plan)

App Service

Custom autoscale

Autoscale setting name	MiniProjectNo220220705153750Plan-Autoscale-283
Resource group	WepApiProject
Instance count	1

Default* Auto created scale condition

Delete warning: The very last or default recurrence rule cannot be deleted. Instead, you can disable autoscale to tur off autoscale.

Scale mode: (●) Scale based on a metric ( ) Scale to a specific instance count

Rules: It is recommended to have at least one scale out rule. To create new rules, click Add a rule.

Scale in

When MiniProjectNo220220... (Average) CpuPercentage < 20 Decrease count by 1

+ Add a rule

Instance limits: Minimum 1, Maximum 1, Default 1

Schedule: This scale condition is executed when none of the other scale condition(s) match

+ Add a scale condition

Scale rule

CpuPercentage (Average): 6.31 %

☐ Enable metric divide by instance count

Operator *: Greater than

Metric threshold to trigger scale action *: 70 %

Duration (minutes) *: 10

Time grain (minutes): 1

Time grain statistic *: Average

Action

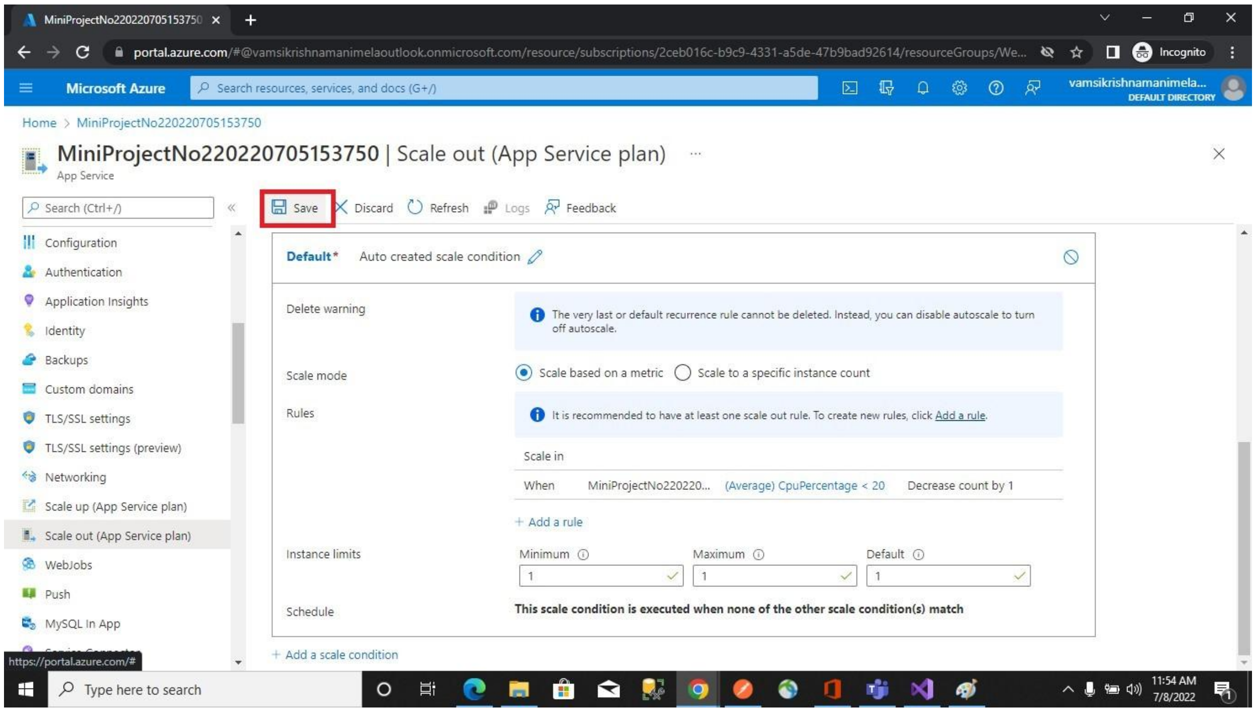
Operation *: Increase count by

Cool down (minutes) *: 5

Instance count *: 1

Add

4. **We have To Save the ScaleOut.**



MiniProjectNo220220705153750 | Scale out (App Service plan)

App Service

Save | Discard | Refresh | Logs | Feedback

Default* Auto created scale condition

Delete warning: The very last or default recurrence rule cannot be deleted. Instead, you can disable autoscale to turn off autoscale.

Scale mode: (●) Scale based on a metric ( ) Scale to a specific instance count

Rules: It is recommended to have at least one scale out rule. To create new rules, click Add a rule.

Scale in

When MiniProjectNo220220... (Average) CpuPercentage < 20 Decrease count by 1

+ Add a rule

Instance limits: Minimum 1, Maximum 1, Default 1

Schedule: This scale condition is executed when none of the other scale condition(s) match

+ Add a scale condition

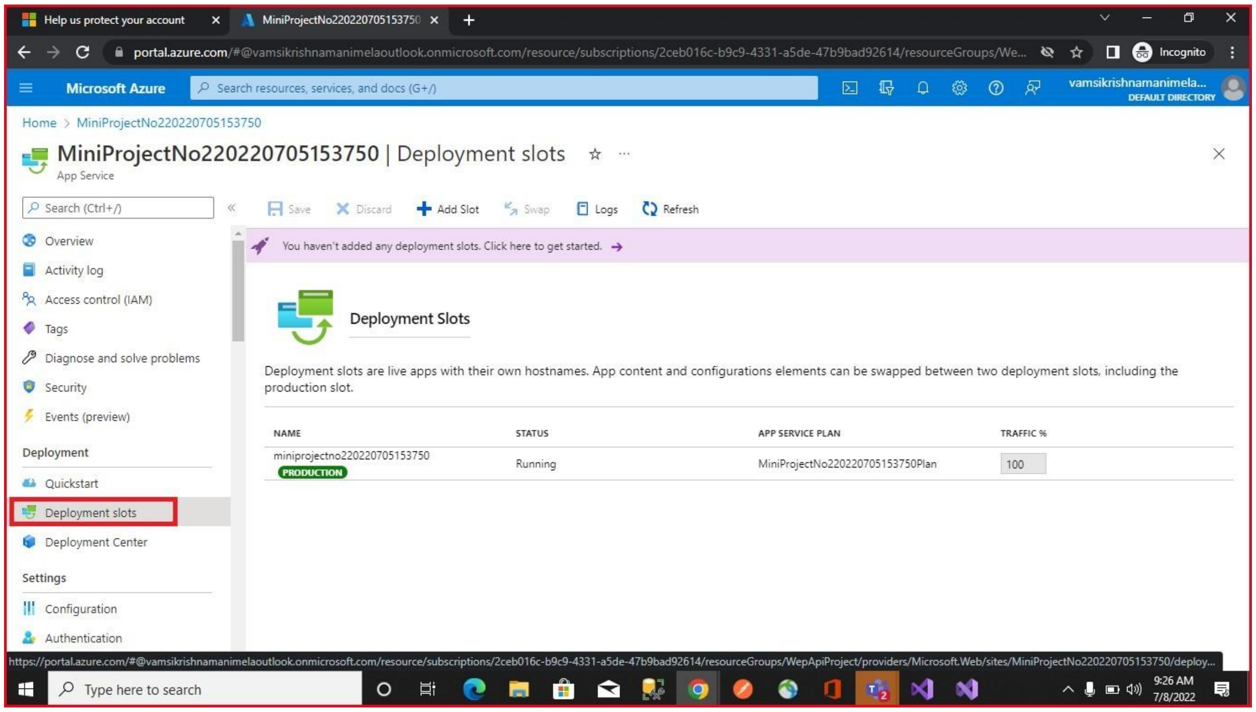
3)Configure Deployment Slots For Staging And Production?

Azure Functions deployment slots allow your function app to run different instances called "slots". Slots are different environments exposed via a publicly available endpoint. One app instance is always mapped to the production slot, and you can swap instances assigned to a slot on demand. Function apps running under the Apps Service plan may have multiple slots, while under the Consumption plan only one slot is allowed.

Add a slot:

You can add a slot via the CLI or through the portal. The following steps demonstrate how to create a new slot in the portal:
Navigate to your function app.

1)Select Deployment slots



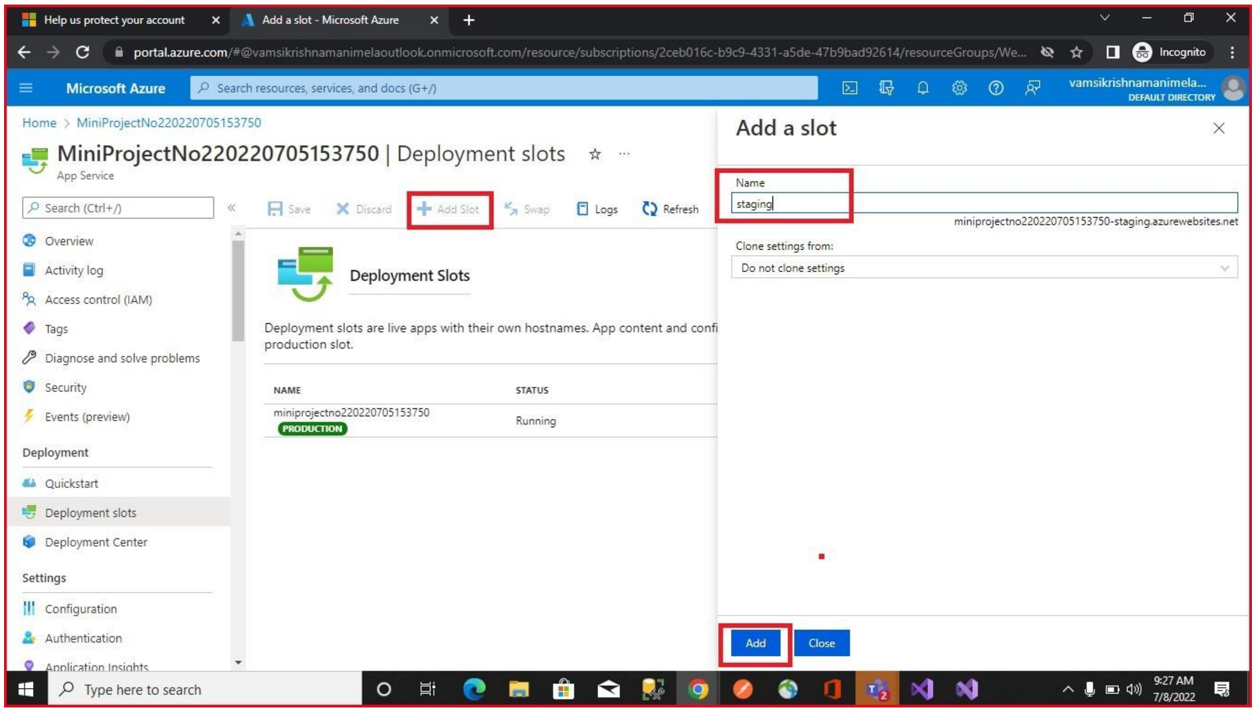
You haven't added any deployment slots. Click here to get started.

Deployment Slots

Deployment slots are live apps with their own hostnames. App content and configurations elements can be swapped between two deployment slots, including the production slot.

NAME	STATUS	APP SERVICE PLAN	TRAFFIC %
miniprojectno220220705153750 PRODUCTION	Running	MiniProjectNo220220705153750Plan	100

2)select + Add Slot. And Type the name of the slot and select Add.



Deployment slots are live apps with their own hostnames. App content and confi production slot.

NAME	STATUS
miniprojectno220220705153750 PRODUCTION	Running

Name: staging
miniprojectno220220705153750-staging.azurewebsites.net
Clone settings from: Do not clone settings

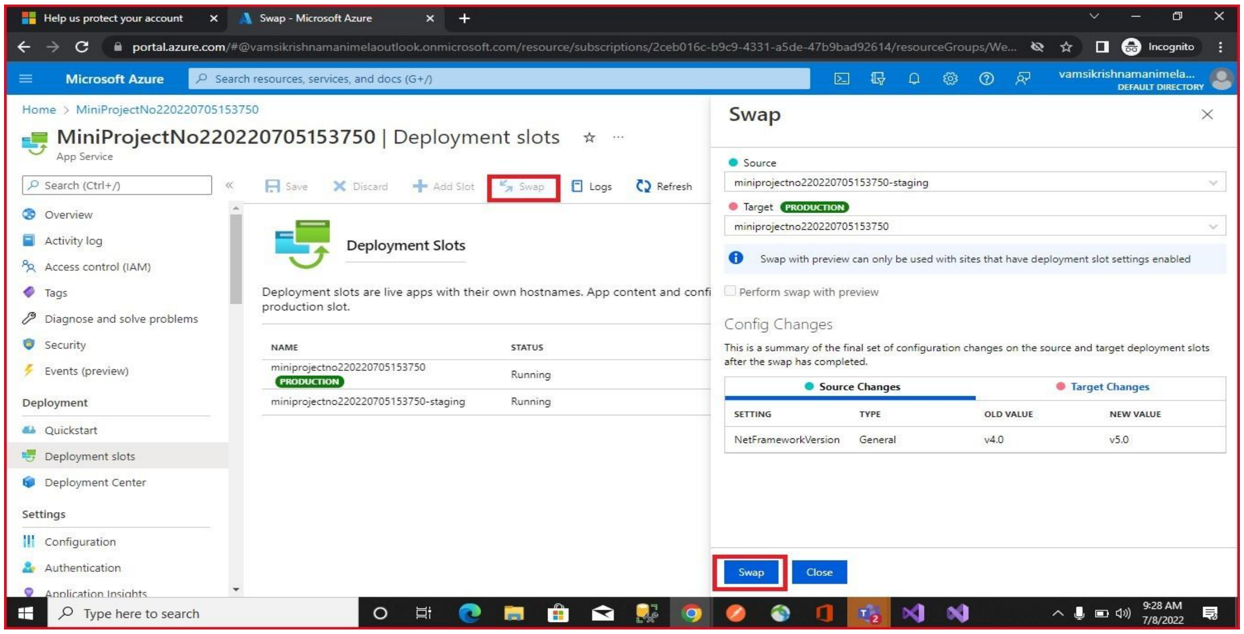
Swap slots:

You can swap slots via the CLI or through the portal. The following steps demonstrate how to swap slots in the portal:

Navigate to the function app.

3. **Select Deployment slots, and then select Swap.**

Verify the configuration settings for your swap and select **Swap**



Deployment slots are live apps with their own hostnames. App content and confi production slot.

NAME	STATUS
miniprojectno220220705153750 PRODUCTION	Running
miniprojectno220220705153750-staging	Running

Source: miniprojectno220220705153750-staging
Target PRODUCTION: miniprojectno220220705153750

Swap with preview can only be used with sites that have deployment slot settings enabled

☐ Perform swap with preview

Config Changes

This is a summary of the final set of configuration changes on the source and target deployment slots after the swap has completed.

Source Changes | Target Changes

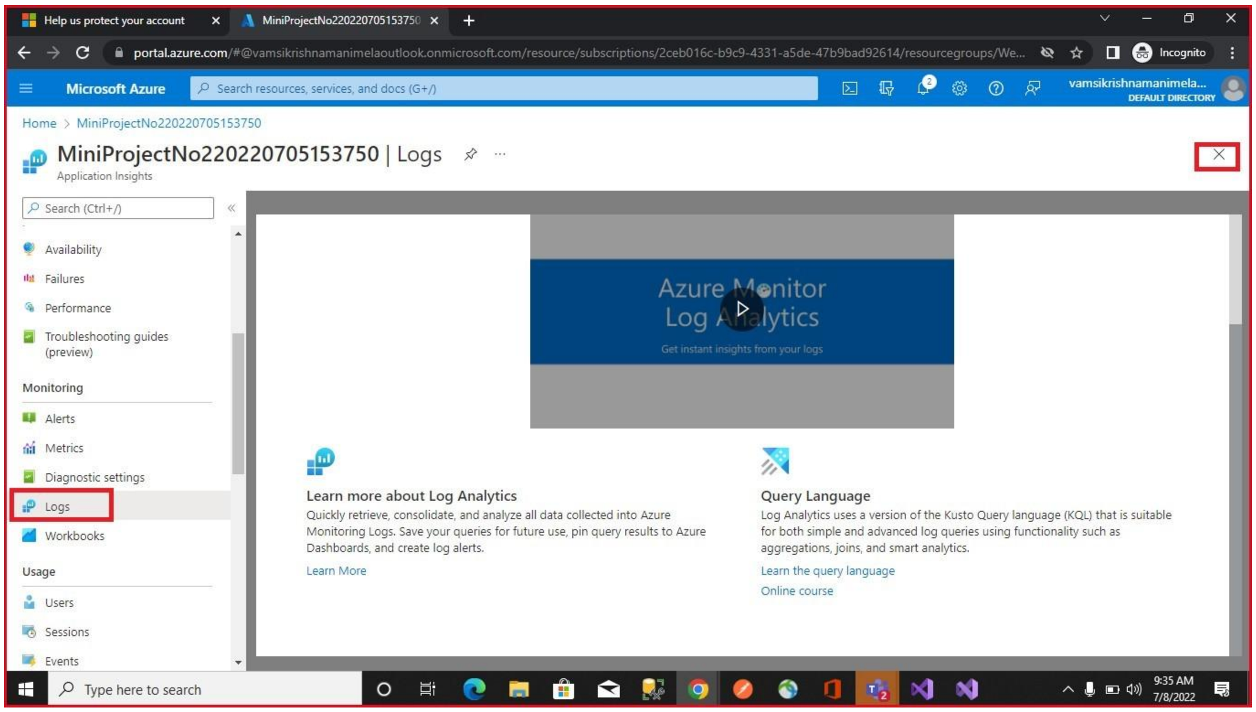
SETTING	TYPE	OLD VALUE	NEW VALUE
NetFrameworkVersion	General	v4.0	v5.0

4. **Work With Log Analytics With The Sample Logs Available ?**

Log Analytics is a tool in the Azure portal to edit and run log queries from data collected by Azure Monitor logs and interactively analyze their results. You can use Log Analytics queries to retrieve records that match particular criteria, identify trends, analyze patterns, and provide various insights into your data.
This tutorial walks you through the Log Analytics interface, gets you started with some basic queries, and shows you how you can work with the results. You'll learn how to:

- Understand the log data schema.
- Write and run simple queries, and modify the time range for queries.
- Filter, sort, and group query results.

1. **Open Azure select Your Project Name One Overview Will Come Will Come Select Logs**


Help us protect your account
MiniProjectNo20220705153750
portal.azure.com/#@vamsikrishnamanimelaoutlook.onmicrosoft.com/resource/subscriptions/2ceb016c-b9c9-4331-a5de-47b9bad92614/resourcegroups/We...
Incognito
Microsoft Azure
Search resources, services, and docs (G+/)
vamsikrishnamanimela...
DEFAULT DIRECTORY
Home > MiniProjectNo20220705153750
MiniProjectNo20220705153750 | Logs
Application Insights
Search (Ctrl+/)
Availability
Failures
Performance
Troubleshooting guides (preview)
Monitoring
Alerts
Metrics
Diagnostic settings
Logs
Workbooks
Usage
Users
Sessions
Events
Azure Monitor
Log Analytics
Get instant insights from your logs
Type here to search
9:35 AM
7/8/2022

Learn more about Log Analytics

Quickly retrieve, consolidate, and analyze all data collected into Azure Monitoring Logs. Save your queries for future use, pin query results to Azure Dashboards, and create log alerts.

Learn More

Query Language

Log Analytics uses a version of the Kusto Query language (KQL) that is suitable for both simple and advanced log queries using functionality such as aggregations, joins, and smart analytics.

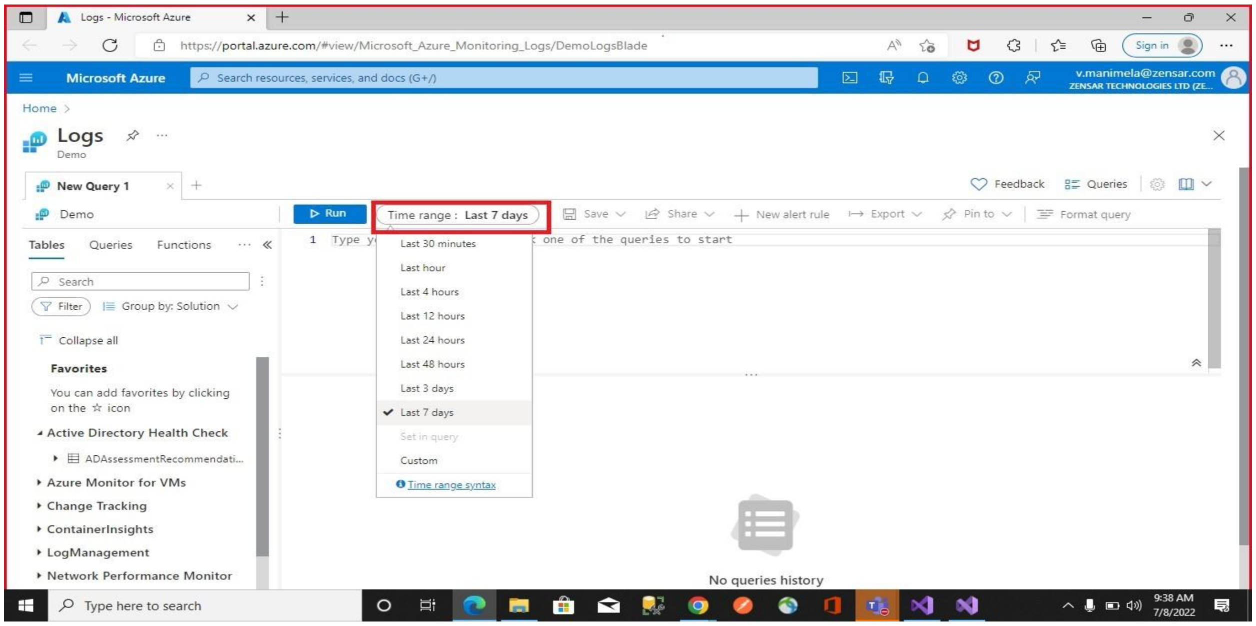
Learn the query language

Online course

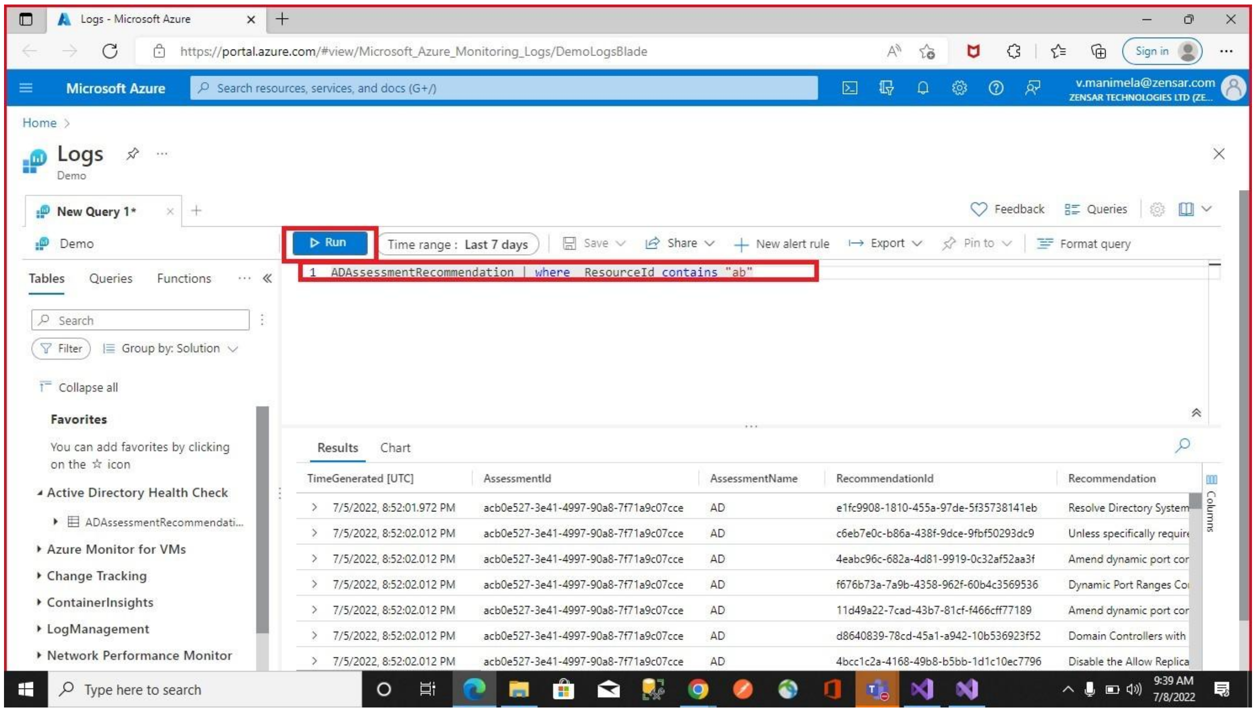
Time range:

All queries return records generated within a set time range. By default, the query returns records generated in the last 24 hours.
You can set a different time range by using The Where Operator in the query.
You can also use the **Time range** dropdown list at the top of the screen.

2. **Let's change the time range of the query by selecting Last 7 hours from the Time range dropdown.**



3. **Write Code Here And Select Run to return the results**



Time range : Last 7 days

```
ADAssessmentRecommendation | where  ResourceId contains "ab"
```

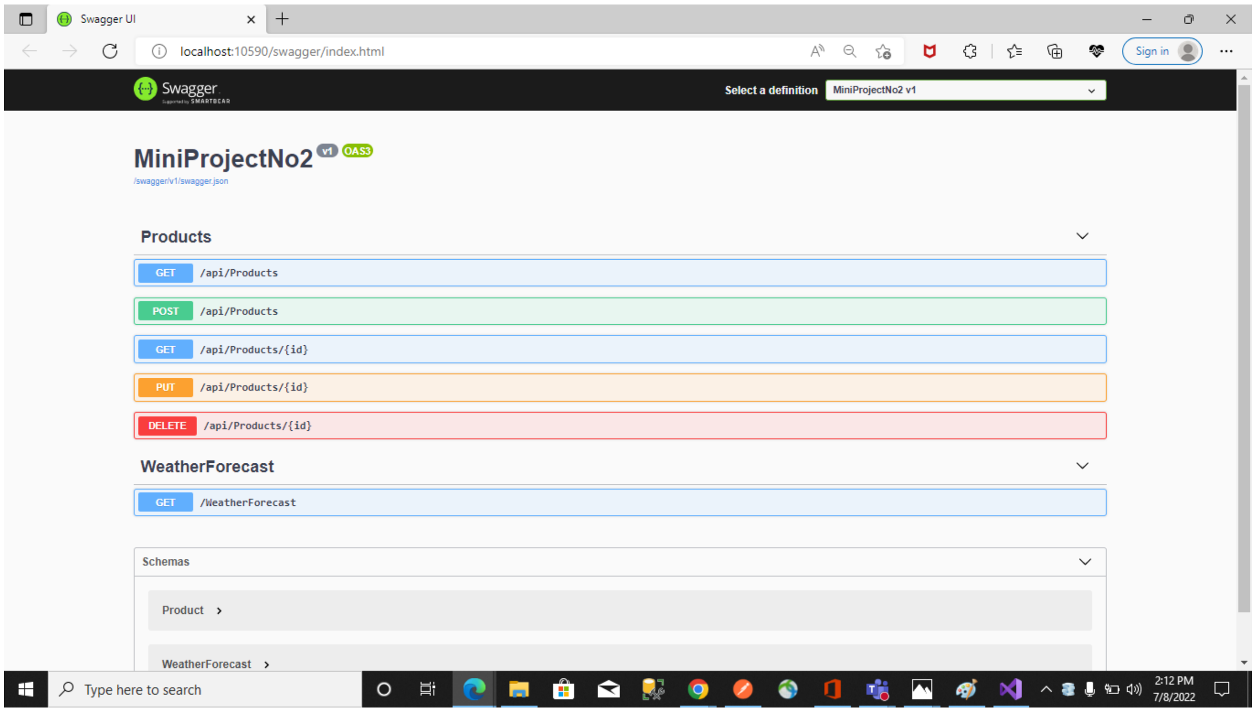
TimeGenerated [UTC]	AssessmentId	AssessmentName	RecommendationId	Recommendation
7/5/2022, 8:52:01.972 PM	acb0e527-3e41-4997-90a8-7f71a9c07cce	AD	e1fc9908-1810-455a-97de-5f35738141eb	Resolve Directory System
7/5/2022, 8:52:02.012 PM	acb0e527-3e41-4997-90a8-7f71a9c07cce	AD	c6eb7e0c-b86a-438f-9dce-9fbf50293dc9	Unless specifically require
7/5/2022, 8:52:02.012 PM	acb0e527-3e41-4997-90a8-7f71a9c07cce	AD	4eabc96c-682a-4d81-9919-0c32af52aa3f	Amend dynamic port cor
7/5/2022, 8:52:02.012 PM	acb0e527-3e41-4997-90a8-7f71a9c07cce	AD	f676b73a-7a9b-4358-962f-60b4c3569536	Dynamic Port Ranges Co
7/5/2022, 8:52:02.012 PM	acb0e527-3e41-4997-90a8-7f71a9c07cce	AD	11d49a22-7cad-43b7-81cf-f466cff77189	Amend dynamic port cor
7/5/2022, 8:52:02.012 PM	acb0e527-3e41-4997-90a8-7f71a9c07cce	AD	d8640839-78cd-45a1-a942-10b536923f52	Domain Controllers with
7/5/2022, 8:52:02.012 PM	acb0e527-3e41-4997-90a8-7f71a9c07cce	AD	4bcc1c2a-4168-49b8-b5bb-1d1c10ec7796	Disable the Allow Replica

5)Configure Swagger For The Api?

Swagger UI

Swagger Ui offers a web-based UI that provides information about the service, using the generated Open API specification. Both Swashbuckler and N Swag include an embedded version of Swagger UI, so that it can be hosted in your ASP.NET Core app using a middleware registration call. The web UI looks like this:

1. **Swagger Home Page When Ever You Run The Project It Will Displayed**



MiniProjectNo2 v1 OAS3
/swagger/v1/swagger.json

Products

GET /api/Products
POST /api/Products
GET /api/Products/{id}
PUT /api/Products/{id}
DELETE /api/Products/{id}

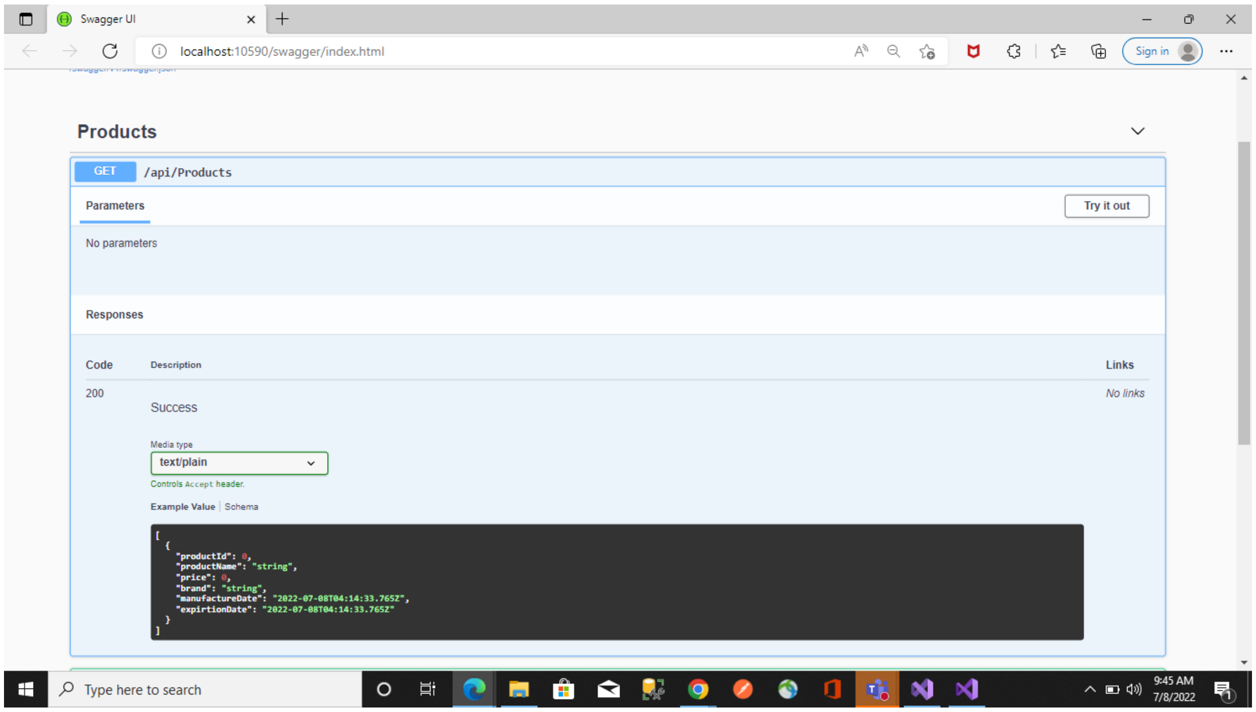
WeatherForecast

GET /WeatherForecast

Schemas

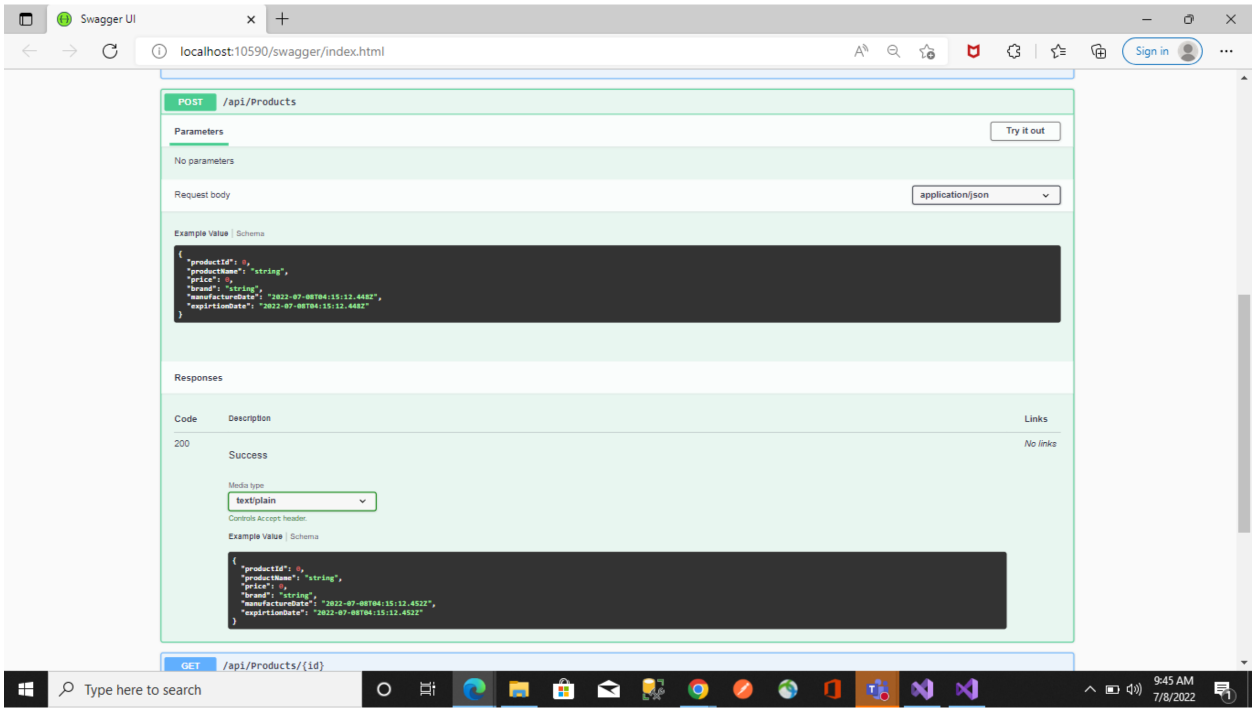
Product >
WeatherForecast >

2. Click On Get



```
[
  {
    "productId": 0,
    "productName": "string",
    "price": 0,
    "brand": "string",
    "manufactureDate": "2022-07-08T04:14:33.765Z",
    "expirtionDate": "2022-07-08T04:14:33.765Z"
  }
]
```

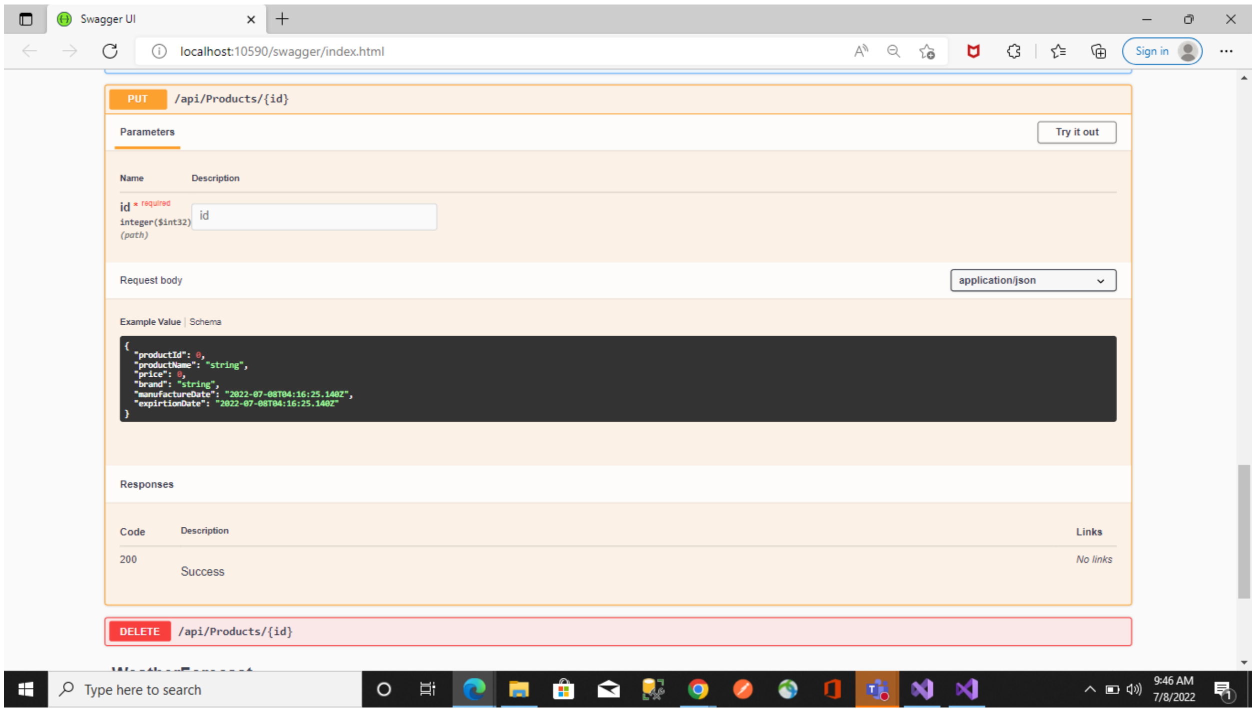
3. Click On Post



```
{
  "productId": 0,
  "productName": "string",
  "price": 0,
  "brand": "string",
  "manufactureDate": "2022-07-08T04:15:12.448Z",
  "expirtionDate": "2022-07-08T04:15:12.448Z"
}
```

```
{
  "productId": 0,
  "productName": "string",
  "price": 0,
  "brand": "string",
  "manufactureDate": "2022-07-08T04:15:12.452Z",
  "expirtionDate": "2022-07-08T04:15:12.452Z"
}
```

4. Click On Put



PUT /api/Products/{id}

Parameters

Name	Description
id * required integer($int32) (path)	id

Request body — application/json

Example Value | Schema

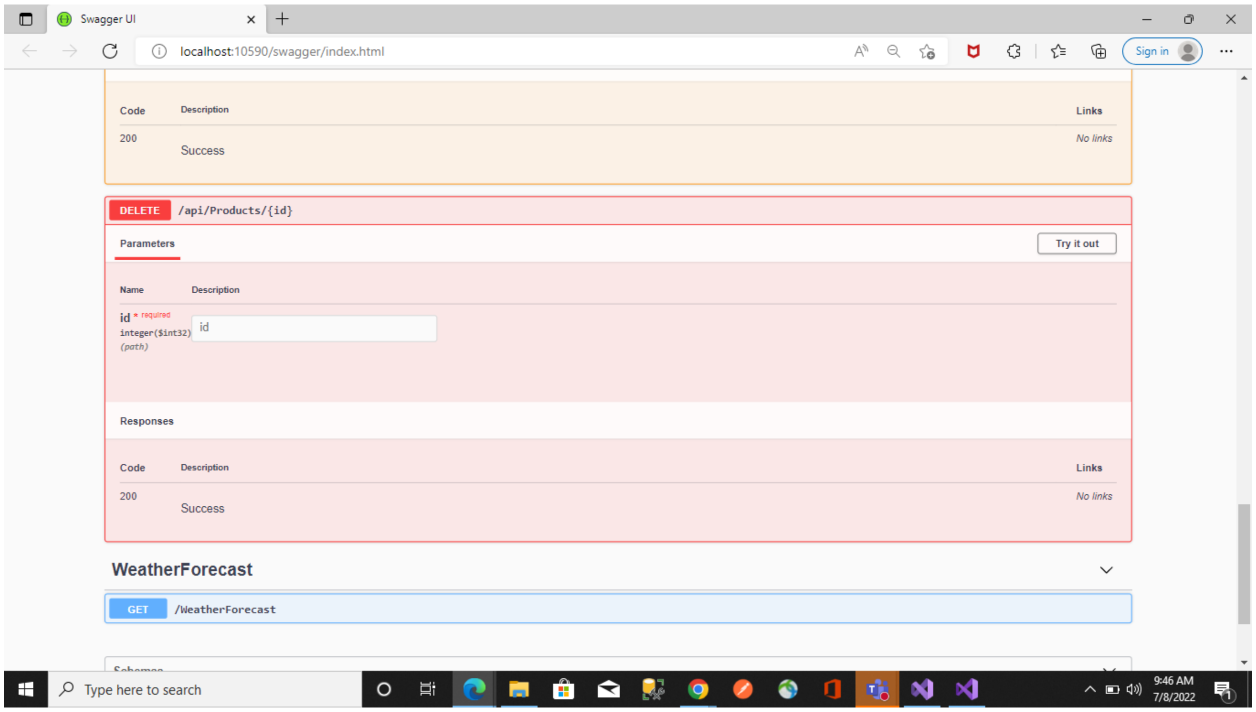
```
{
  "productId": 0,
  "productName": "string",
  "price": 0,
  "brand": "string",
  "manufactureDate": "2022-07-08T04:16:25.140Z",
  "expirtionDate": "2022-07-08T04:16:25.140Z"
}
```

Responses

Code	Description	Links
200	Success	No links

DELETE /api/Products/{id}

5. Delete For Click On Delete



Code	Description	Links
200	Success	No links

DELETE /api/Products/{id}

Parameters

Name	Description
id * required integer($int32) (path)	id

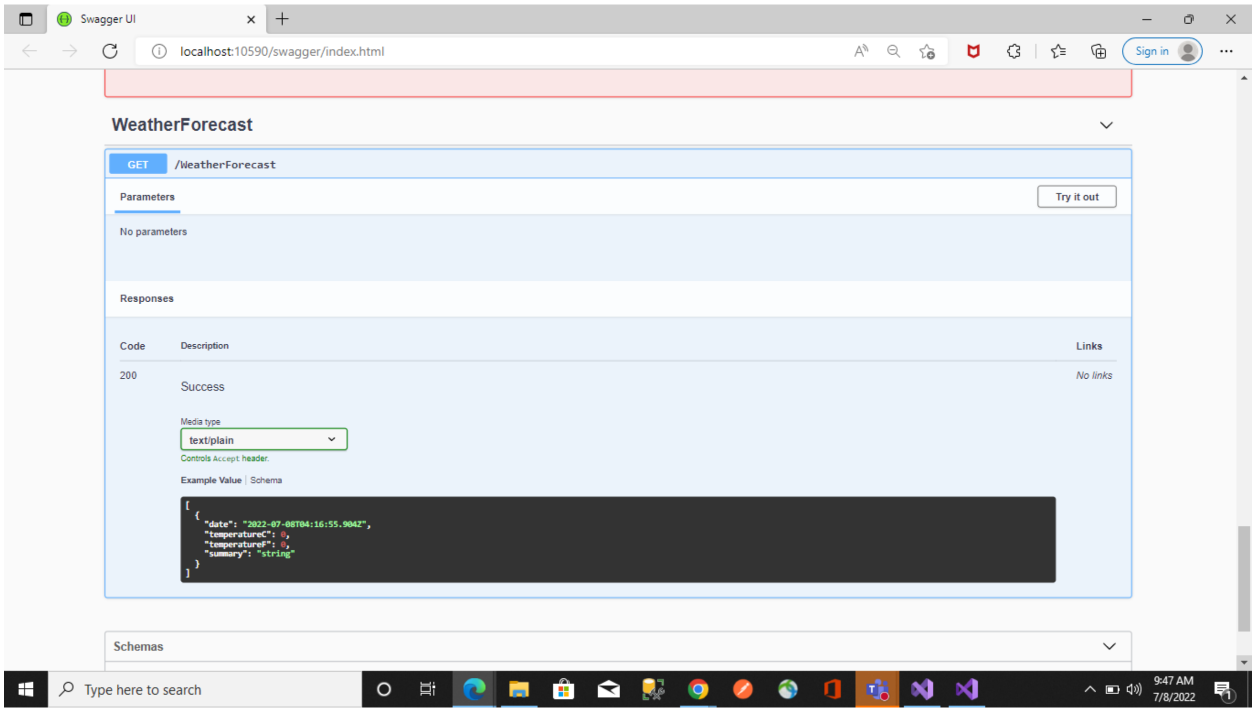
Responses

Code	Description	Links
200	Success	No links

WeatherForecast

GET /WeatherForecast

6. Weather Forecast Get



WeatherForecast

GET /WeatherForecast

Parameters

Try it out

No parameters

Responses

Code	Description	Links
200	Success	*No links*

Media type

text/plain

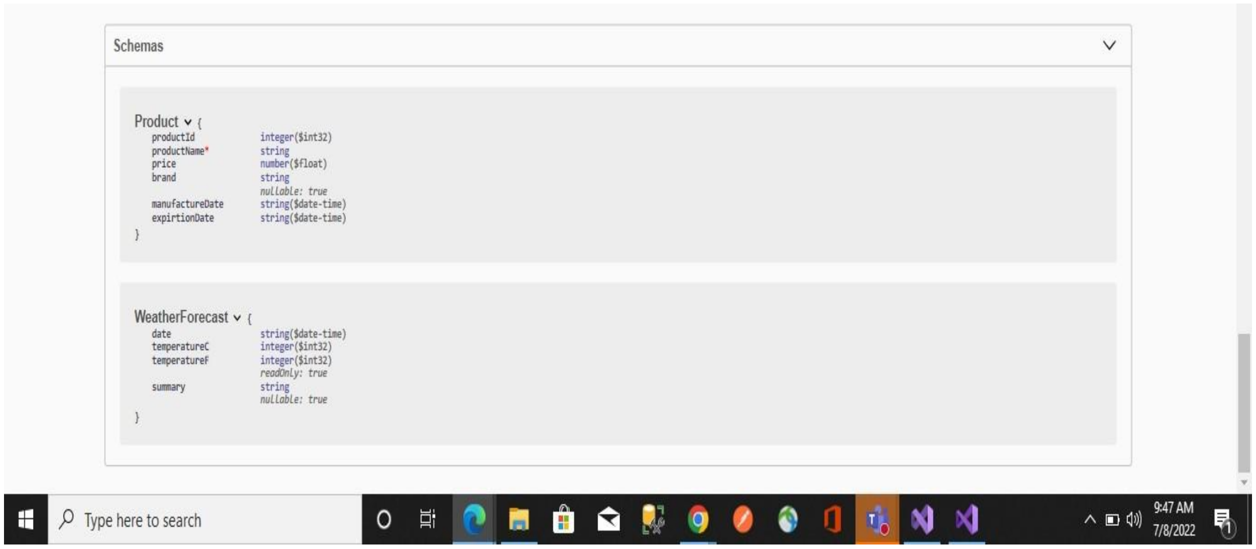
Controls Accept header.

Example Value | Schema

```
[
  {
    "date": "2022-07-08T04:16:55.904Z",
    "temperatureC": 0,
    "temperatureF": 0,
    "summary": "string"
  }
]
```

Schemas

7. Products and Weather Forecast



Schemas

```
Product ∨ {
   productId          integer($int32)
   productName*       string
   price              number($float)
   brand              string
                      nullable: true
   manufactureDate    string($date-time)
   expirtionDate      string($date-time)
}
```

```
WeatherForecast ∨ {
   date               string($date-time)
   temperatureC       integer($int32)
   temperatureF       integer($int32)
                      readOnly: true
   summary            string
                      nullable: true
}
```

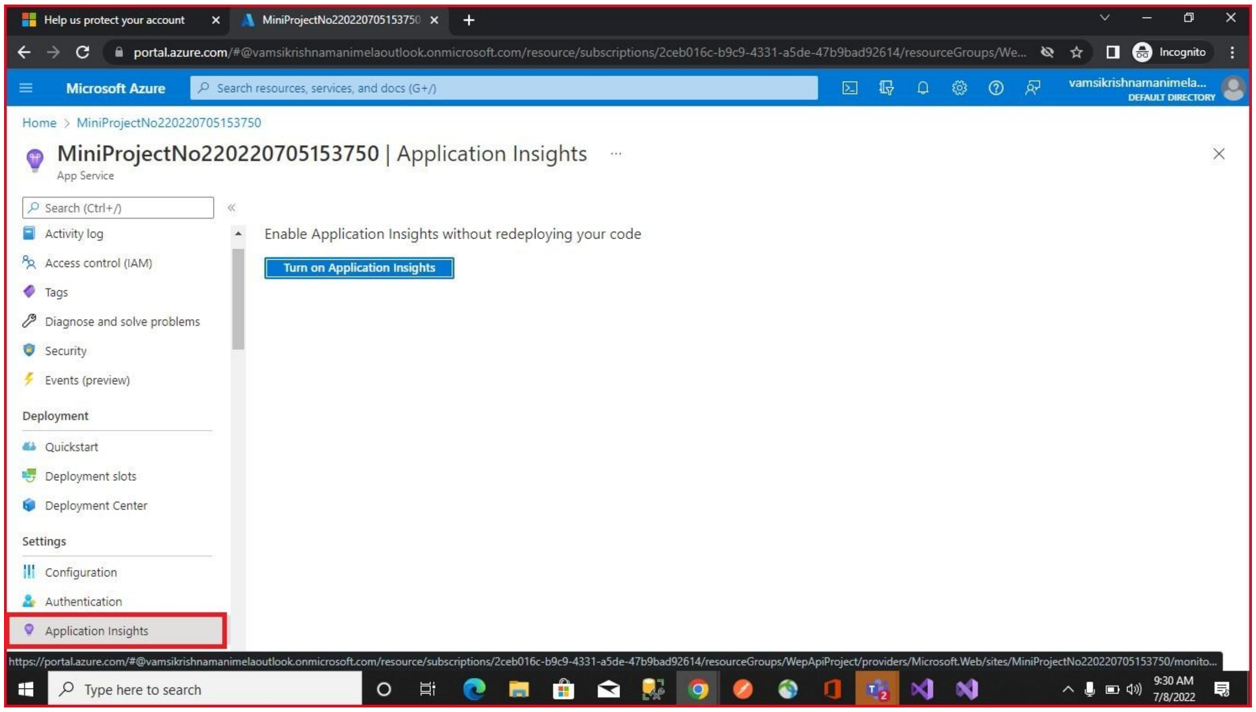
6. Configure Application Insights for the Project?

Application Insights is a feature of Azure Monitor that provides extensible application performance management (APM) and monitoring for live web apps. Developers and DevOps professionals can use Application Insights to:

- Automatically detect performance anomalies.
- Help diagnose issues by using powerful analytics tools.

- See what users actually do with apps. Application Insights:
  - Supports a wide variety of platforms, including .NET, Node.js, Java, and Python.
  - Works for apps hosted on-premises, hybrid, or on any public cloud.
  - Integrates with DevOps processes.
  - Can monitor and analyze telemetry from mobile apps by integrating with Visual Studio App Center.

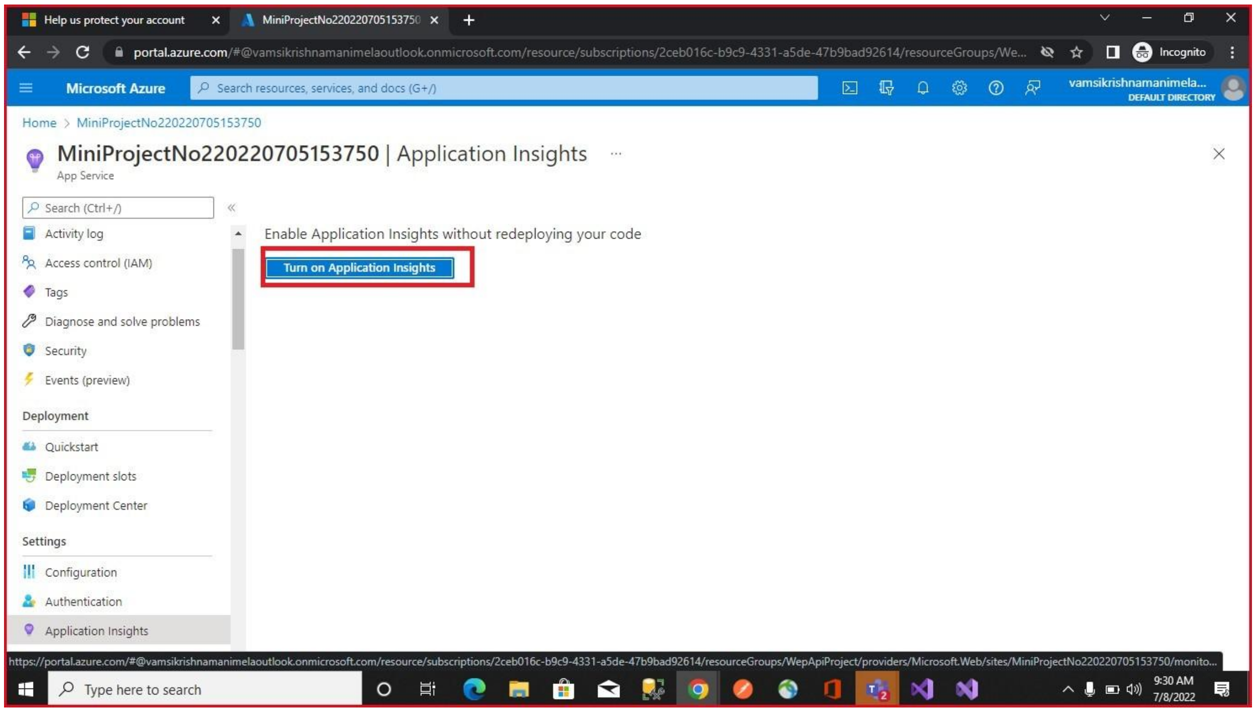
1. **Open Azure Home Click On Your Project And Click On Application Insights**


MiniProjectNo220220705153750 | Application Insights

App Service

Enable Application Insights without redeploying your code

2. **Then You Have To Click On Run on Application Instances**

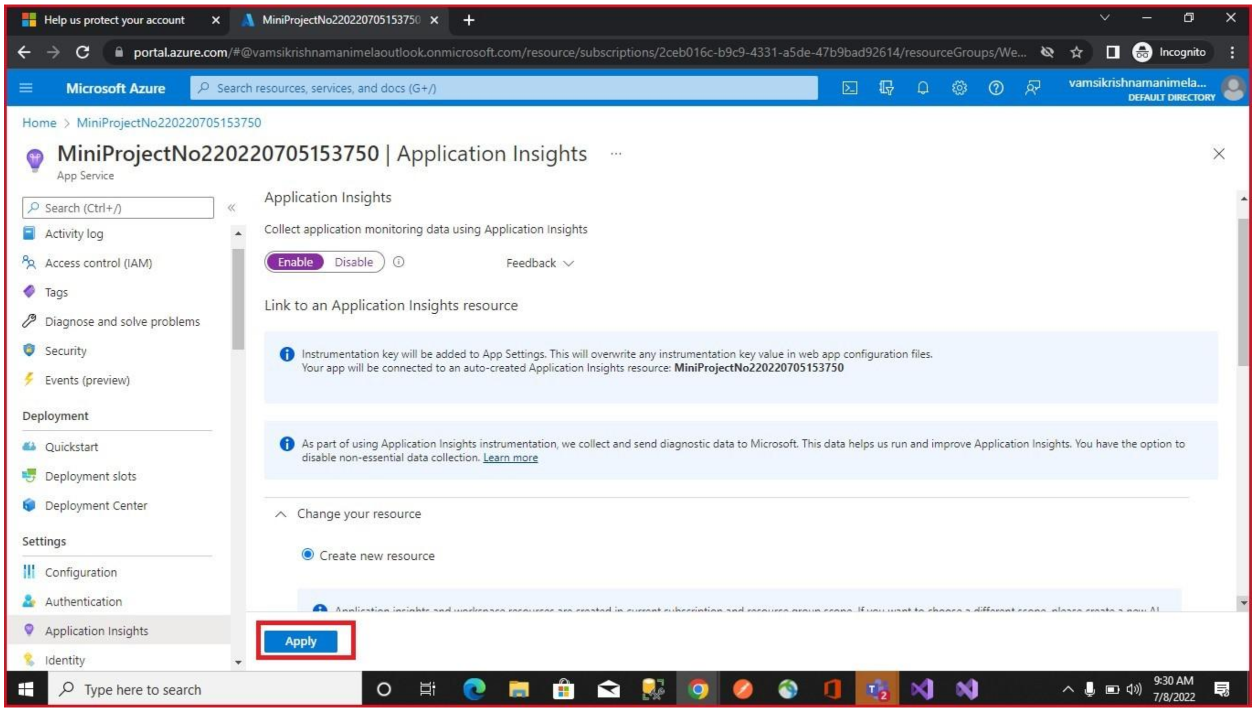


MiniProjectNo220220705153750 | Application Insights

App Service

Enable Application Insights without redeploying your code

3. **Enable And Apply**



MiniProjectNo220220705153750 | Application Insights

App Service

Application Insights

Collect application monitoring data using Application Insights

[✓ Enable] Disable

Link to an Application Insights resource

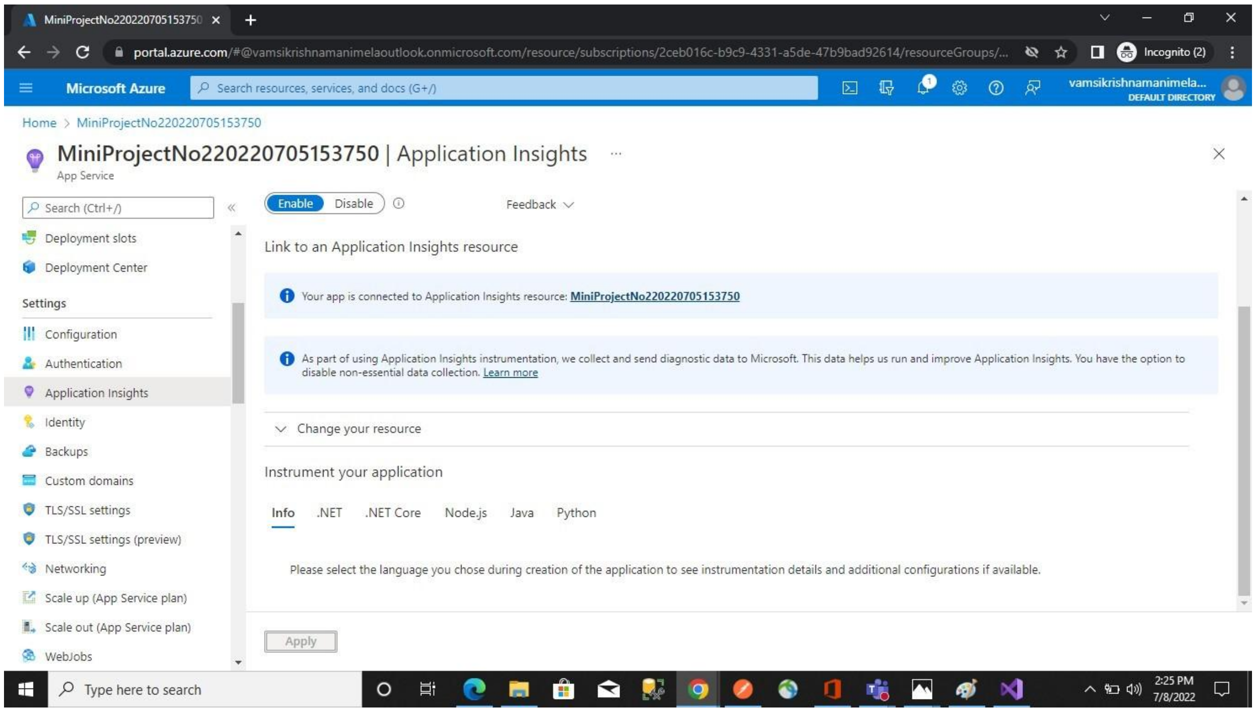
Instrumentation key will be added to App Settings. This will overwrite any instrumentation key value in web app configuration files.
Your app will be connected to an auto-created Application Insights resource: **MiniProjectNo220220705153750**

As part of using Application Insights instrumentation, we collect and send diagnostic data to Microsoft. This data helps us run and improve Application Insights. You have the option to disable non-essential data collection. Learn more

Change your resource

● Create new resource

4. Link To The Application Instance Resource


MiniProjectNo20220705153750
portal.azure.com/#@vamsikrishnamanimelaoutlook.onmicrosoft.com/resource/subscriptions/2ceb016c-b9c9-4331-a5de-47b9bad92614/resourceGroups/...
Incognito (2)
Microsoft Azure
Search resources, services, and docs (G+/)
vamsikrishnamanimela...
DEFAULT DIRECTORY
Home > MiniProjectNo20220705153750
MiniProjectNo20220705153750 | Application Insights
App Service
Search (Ctrl+/)
Deployment slots
Deployment Center
Settings
Configuration
Authentication
Application Insights
Identity
Backups
Custom domains
TLS/SSL settings
TLS/SSL settings (preview)
Networking
Scale up (App Service plan)
Scale out (App Service plan)
WebJobs
Enable
Disable
Feedback
Change your resource
Info
.NET
.NET Core
Node.js
Java
Python
Apply
Type here to search
2:25 PM
7/8/2022

Link to an Application Insights resource

Your app is connected to Application Insights resource: MiniProjectNo20220705153750

As part of using Application Insights instrumentation, we collect and send diagnostic data to Microsoft. This data helps us run and improve Application Insights. You have the option to disable non-essential data collection. Learn more

Instrument your application

Please select the language you chose during creation of the application to see instrumentation details and additional configurations if available.