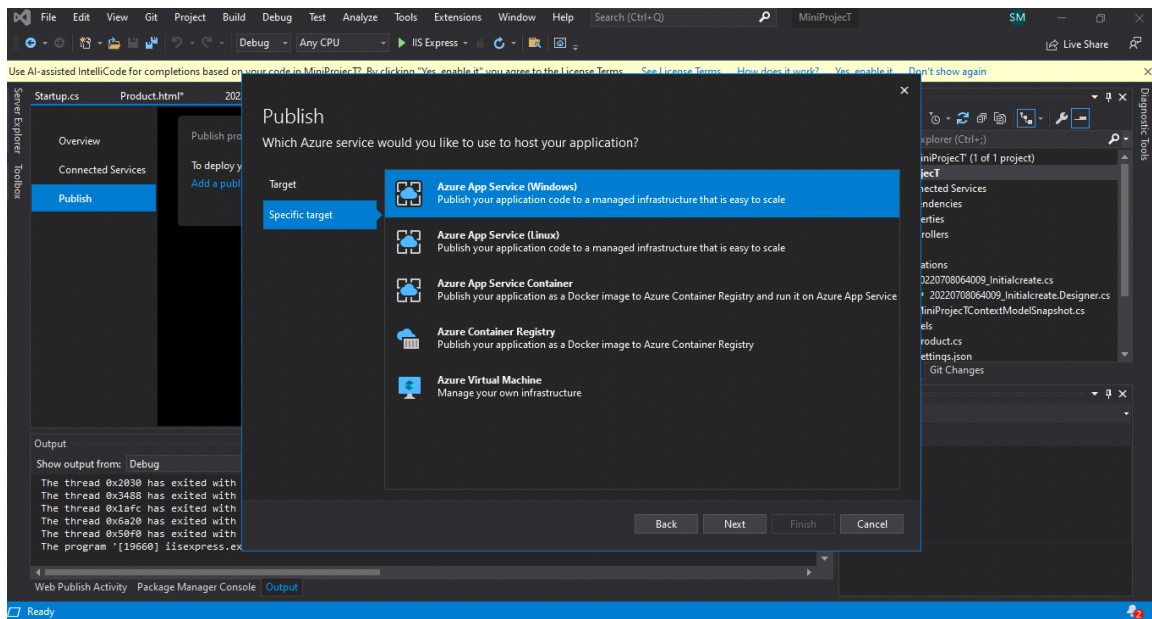
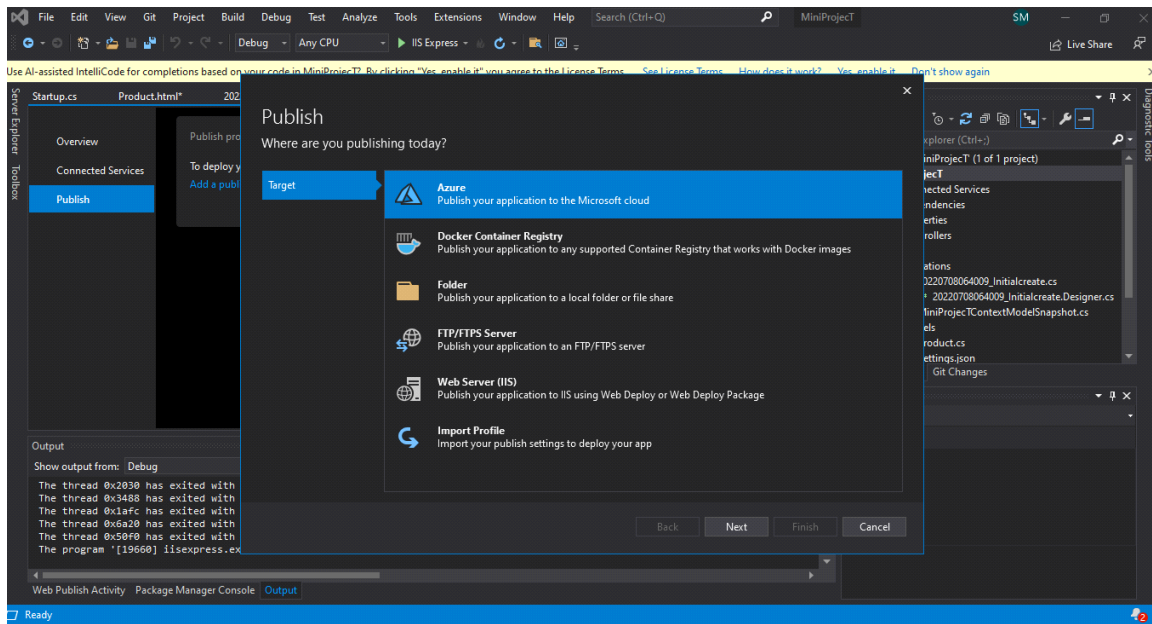


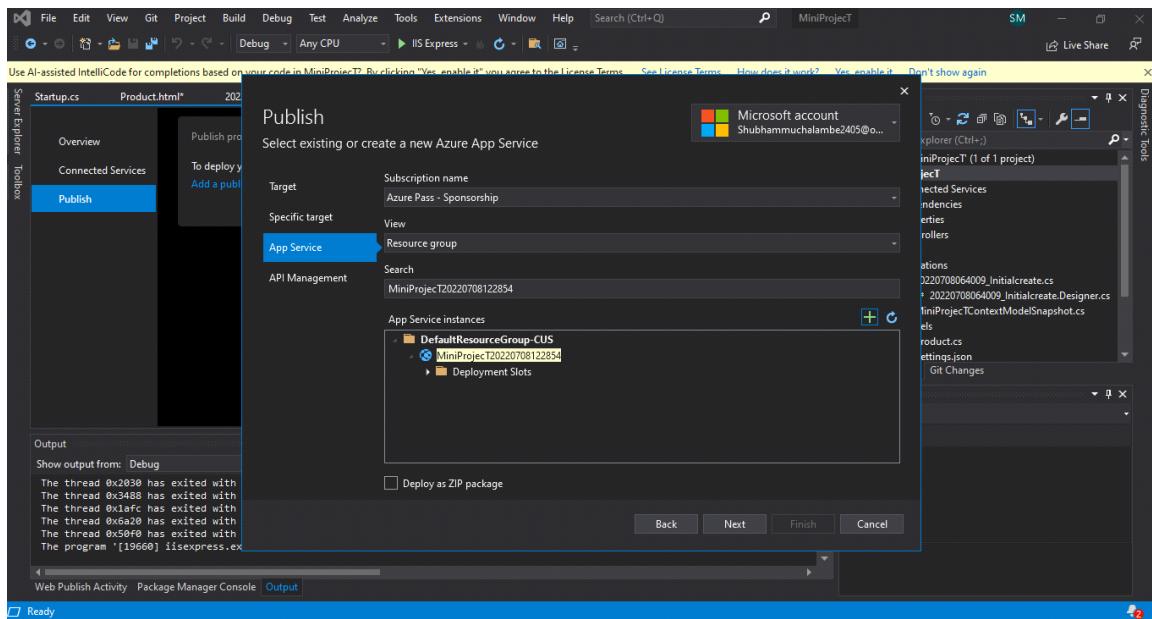
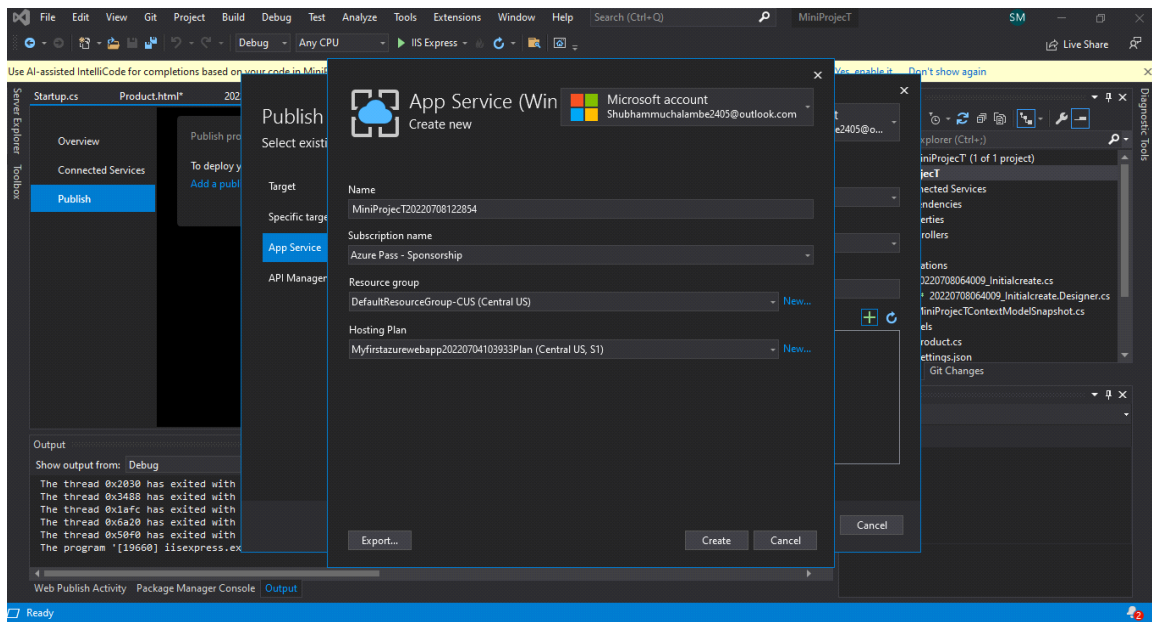
WEB API PROJECT

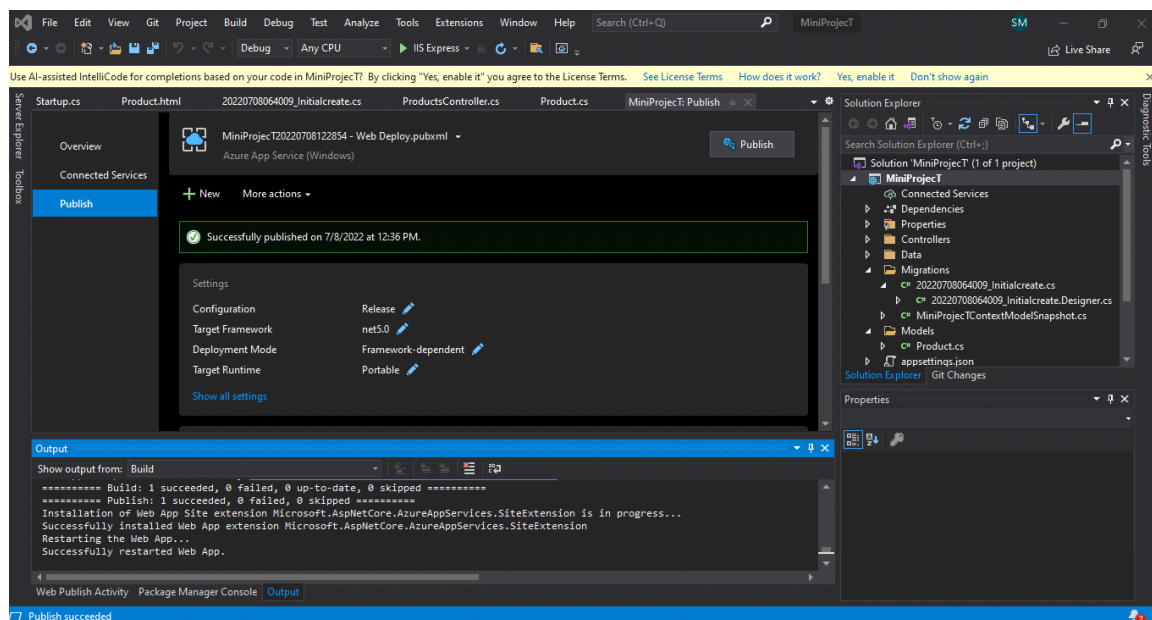
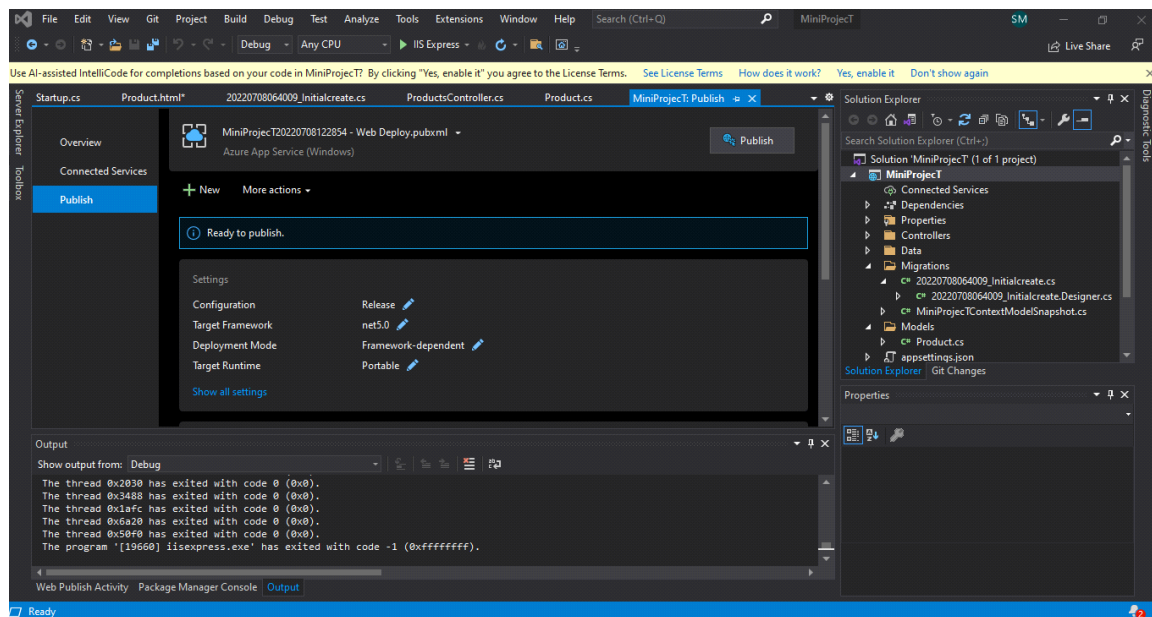
- 1. Create WEB API Project.**
- 2. Add models folder and in that folder add Product.cs Class.**
- 3. Add Controller for Product class Using Entity Frame Work.**
- 4. Open package manager Consoler and follow the below steps.**
 - 4.1. Add-Migration ApiCreate.**
 - 4.2. Update-Database.**
- 5. Add Web Api Client html page in the Project Using Ajax and JQuery.**
- 6. Finally Hosting to the Azure. Follow the bellow Pics.**

Azure Hosting :-

- **Host the web api in azure and consume the same using JQuery Client :-**







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

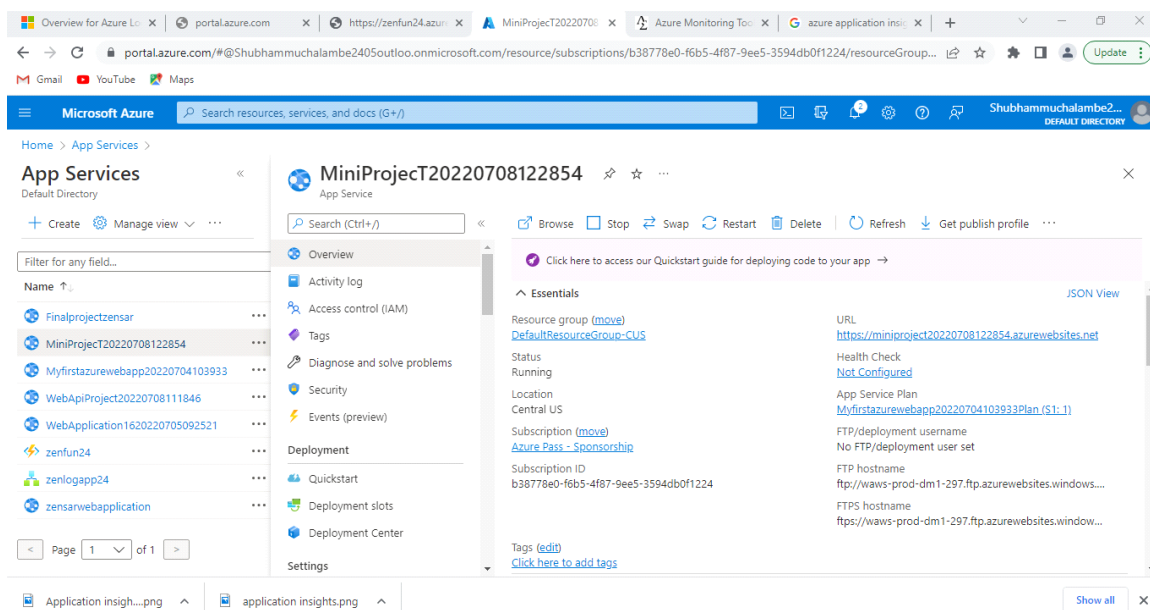
Sites there is no need to configure load balancing separately since this is already provided by the platform.

Follow the Bellow images to add the scale out to our web site.

1.select Custom Auto Scale.

2.Click on Add a rule.

3.Add your rules and click on Add button and Save changes.



Overview - Azure App x Azure Functions Over x Overview for Azure L MiniProject20220708 x https://zenfun24.azure miniproject20220708 x +

portal.azure.com/#@Shubhammuchalambe2405outloo.onmicrosoft.com/resource/subscriptions/b38778e0-f6b5-4f87-9ee5-3594db0f1224/resourceGroup... Update

Gmail YouTube Maps

Microsoft Azure Search resources, services, and docs (G+)

Home > App Services > MiniProject20220708122854

App Services

Default Directory

+ Create Manage view

Filter for any field...

Name

- FinalProjectzensar
- MiniProject20220708122854
- Myfirstazurewebapp20220704103933
- WebApiProject20220708111846
- WebApplication1620220705092521
- zenfun24
- zenlogapp24
- zensarwebapplication

Page 1 of 1

MiniProject20220708122854 | Scale out (App Service plan)

App Service

Search (Ctrl+/)

Save Discard Refresh Logs Feedback

cost effective by adding and removing instances based on demand. [Learn more about Azure Autoscale](#) or view the [how-to video](#).

Choose how to scale your resource

☐ Manual scale
Maintain a fixed instance count

☒ Custom autoscale
Scale on any schedule, based on any metrics

Custom autoscale

Autoscale setting name * Myfirstazurewebapp20220704103933Plan-Autoscale-25

Resource group DefaultResourceGroup-CUS

Instance count 1

Default * Auto created scale condition

Overview - Azure App x Azure Functions Over x Overview for Azure L Scale rule - Microsof x https://zenfun24.azure miniproject20220708 x +

portal.azure.com/#@Shubhammuchalambe2405outloo.onmicrosoft.com/resource/subscriptions/b38778e0-f6b5-4f87-9ee5-3594db0f1224/resourceGroup... Update

Gmail YouTube Maps

Microsoft Azure Search resources, services, and docs (G+)

Home > App Services > MiniProject20220708122854

App Services

Default Directory

+ Create Manage view

Filter for any field...

Name

- FinalProjectzensar
- MiniProject20220708122854
- Myfirstazurewebapp20220704103933
- WebApiProject20220708111846
- WebApplication1620220705092521
- zenfun24
- zenlogapp24
- zensarwebapplication

Page 1 of 1

MiniProject20220708122854 | Scale out (App Service plan)

App Service

Search (Ctrl+/)

Save Discard Refresh Logs Feedback

Scale rule

0% 12:35 PM UTC+05:30

CpuPercentage (Average) 8.65 %

☐ Enable metric divide by instance count

Operator * Greater than Metric threshold to trigger scale action * 70 %

Duration (minutes) * 10

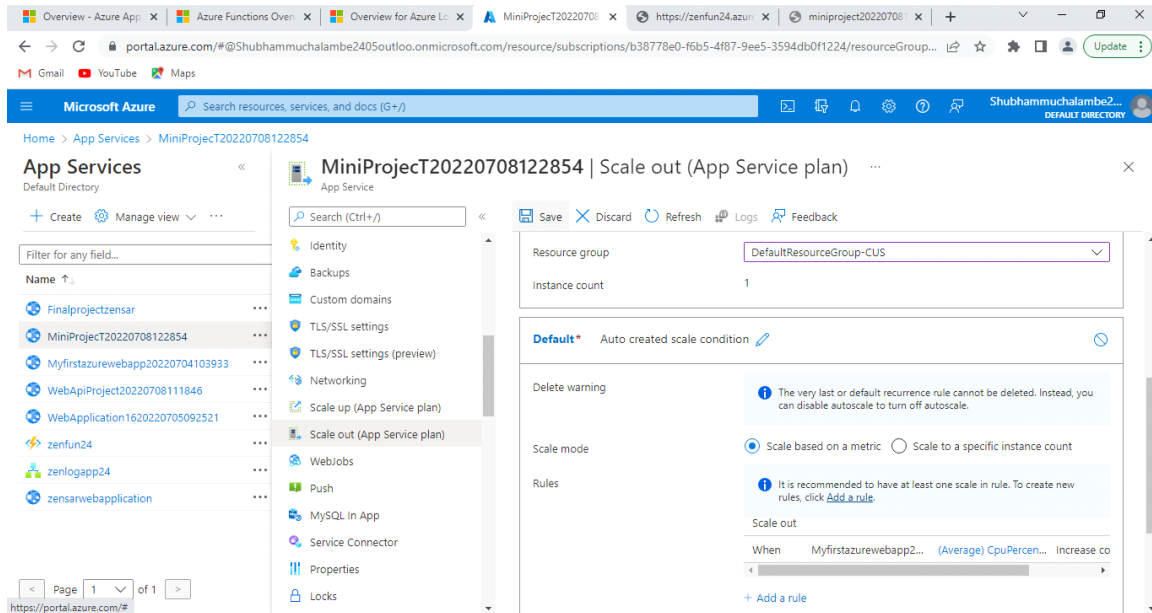
Time grain (minutes) 1 Time grain statistic * Average

Action

Operation * Increase count by Cool down (minutes) * 5

Instance count * 1

Add



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.

The following reflect how functions are affected by swapping slots:

- Traffic redirection is seamless; no requests are dropped because of a swap. This seamless behavior is a result of the next function triggers being routed to the swapped slot.
- Currently executing function are terminated during the swap. Please review [Improve the performance and reliability of Azure Functions](#) to learn how to write stateless and defensive functions.

Follow the bellow images to add deployment slots.

- Click on Add Slot.
- Enter The slot name and click on add button.
- Finally swapping the slots.

Overview - Azure App Services | Azure Functions Overview | Overview for Azure Logic Apps | MiniProject20220708122854 | https://zenfun24.azurewebsites.net/ | miniproject20220708122854 | +

portal.azure.com/#@Shubhammuchalambe2405outloo.onmicrosoft.com/resource/subscriptions/b38778e0-f6b5-4f87-9ee5-3594db0f1224/resourceGroup...

Microsoft Azure Search resources, services, and docs (G+)

Home > App Services > MiniProject20220708122854

MiniProject20220708122854 | Deployment slots

Search (Ctrl+/) Save Discard Add Slot Swap Logs Refresh

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 %
miniproject20220708122854	PRODUCTION Running	Myfirstazurewebapp20220704103933Plan	100

Overview - Azure App Services | Azure Functions Overview | Overview for Azure Logic Apps | Add a slot - Microsoft | https://zenfun24.azurewebsites.net/ | miniproject20220708122854 | +

portal.azure.com/#@Shubhammuchalambe2405outloo.onmicrosoft.com/resource/subscriptions/b38778e0-f6b5-4f87-9ee5-3594db0f1224/resourceGroup...

Microsoft Azure Search resources, services, and docs (G+)

Home > App Services > MiniProject20220708122854

MiniProject20220708122854 | Deployment slots

Search (Ctrl+/) Save Discard Add Slot Swap Logs Refresh

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
miniproject20220708122854	PRODUCTION Running
miniproject20220708122854-staging	Running

Add a slot

Name: staging miniproject20220708122854-staging.azurewebsites.net

Clone settings from: Do not clone settings

Successfully created slot 'staging'

Add Close

Home > App Services > MiniProject20220708122854

MiniProject20220708122854 | 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 %
miniProject20220708122854	Running	Myfirstazurewebapp20220704103933Plan	100
miniProject20220708122854-staging	Running	Myfirstazurewebapp20220704103933Plan	0

Home > App Services > MiniProject20220708122854

MiniProject20220708122854 | Deployment slots

Swap

Source: miniProject20220708122854-staging
Target: miniProject20220708122854

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

Successfully completed swap between slot 'staging' and slot 'production'

Swap Close

4.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.
- Help continuously improve app performance and usability.

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.
- Has connection points to many development tools.
- Can monitor and analyze telemetry from mobile apps by integrating with Visual Studio [App Center](#).

Follow the bellow images to add Application insights

- Trun on Application Insights.
- Select Existing Resource.
- Click on the Apply button.

Overview - Azure App: x | Azure Functions Over: x | Overview for Azure L: x | MiniProject20220701: x | https://zenfun24.azure: x | miniproject20220701: x | + | - | x

portal.azure.com/#@Shubhammchalambe2405outloo.onmicrosoft.com/resource/subscriptions/b38778e0-f6b5-4f87-9ee5-3594db0f1224/resourceGroup... | Update

Gmail | YouTube | Maps

Microsoft Azure | Search resources, services, and docs (G+)

Shubhammchalambe2... | DEFAULT DIRECTORY

Home > App Services > MiniProject20220708122854

MiniProject20220708122854 | Application Insights

App Service

Search (Ctrl+/)

- Security
- Events (preview)
- Deployment
 - Quickstart
 - Deployment slots
 - Deployment Center
- Settings
 - Configuration
 - Authentication
 - Application Insights
 - Identity
 - Backups
 - Custom domains

Application Insights

Collect application monitoring data using Application Insights

Enable **Disable** ⓘ Feedback ▾

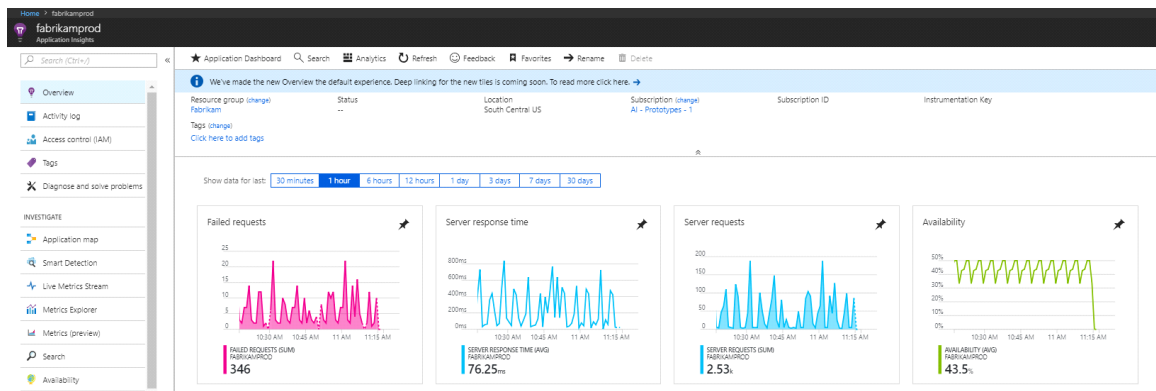
Link to an Application Insights resource

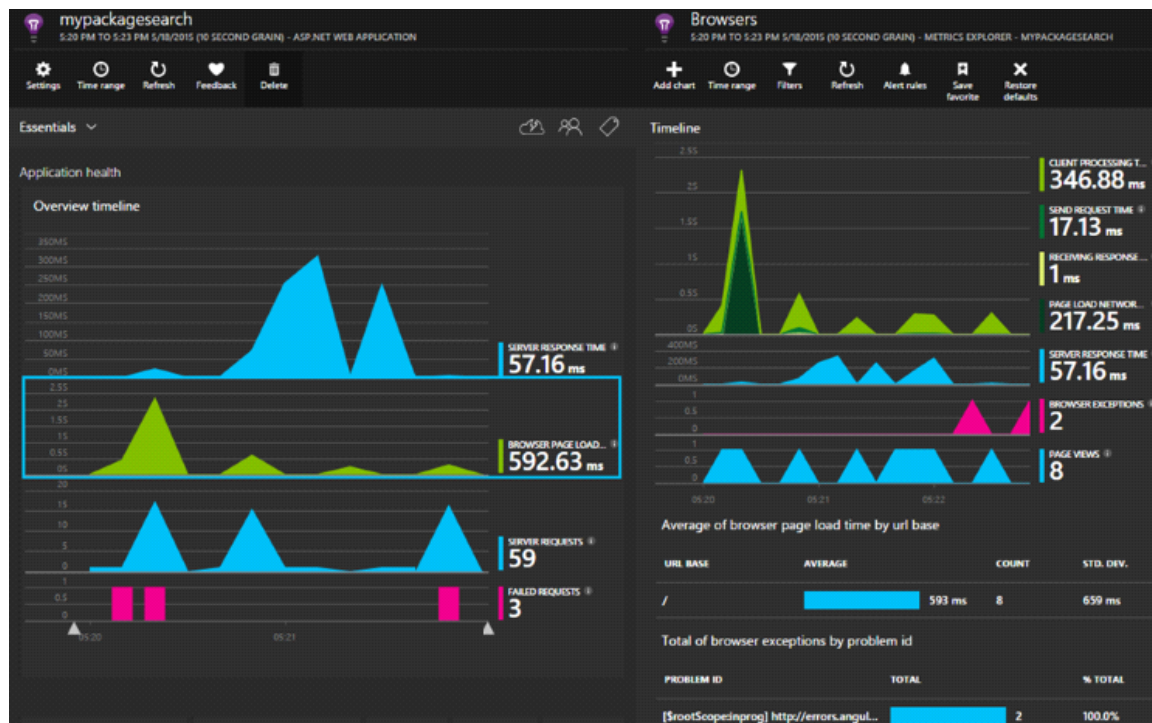
Instrumentation key will be added to App Settings. This will overwrite any instrumentation key value in web app configuration files. Your app will be connected to an auto-created Application Insights resource: **MiniProject20220708122854**

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

Apply





5.Configure Swagger for the Api :-

Swagger UI allows anyone — be it your development team or your end consumers — to visualize and interact with the API's resources without having any of the implementation logic in place. It's automatically generated from your OpenAPI (formerly known as Swagger) Specification, with the visual documentation making it easy for back end implementation and client side consumption.

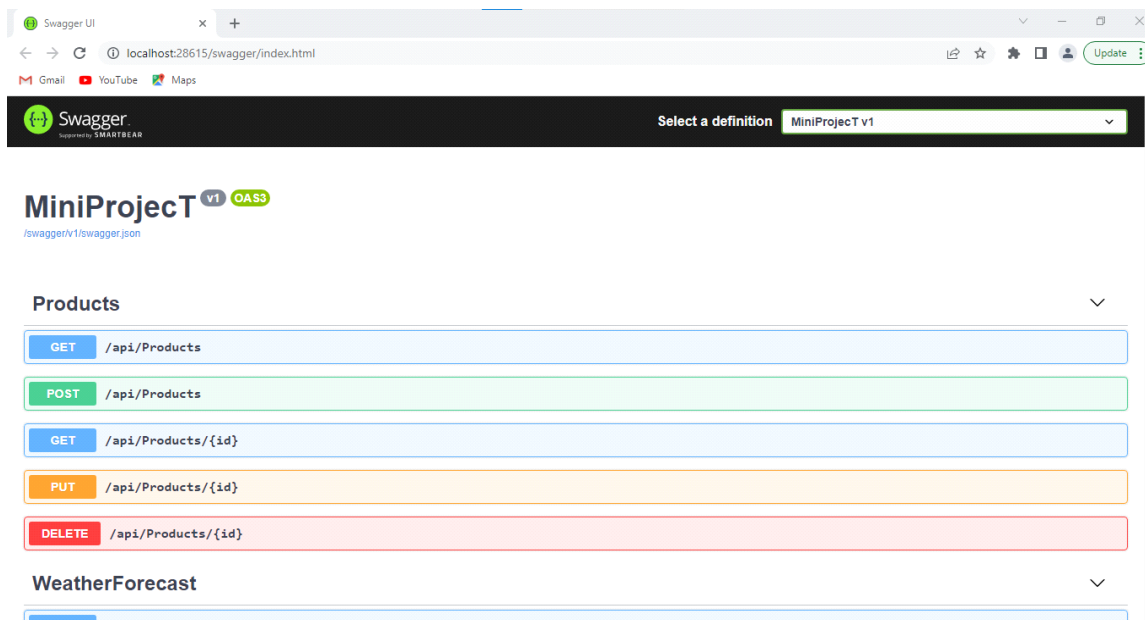
Advantages of Swagger Api :-

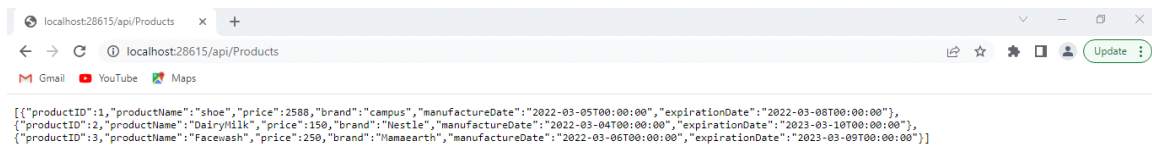
1. Testing is always crucial; on both the development and QA levels. Swagger provides a UI integrated page where all the API methods are listed and enables the user to test any method that is required from the UI.

2. Swagger does the documentation in a conventional way (OpenAPI) which means it is in a machine-readable language. If a user starts the documentation first, Swagger will write the structure of the API automatically based on the written documentation. The API logic relies on the developer and business requirements but the structure will be written by Swagger itself.

3. The user does not need a separate applications to test APIs. Just configure Swagger once in the project and access it through a URL to test the APIs.

These are the major benefits users will see once they start using Swagger. Swagger provides immense support for a wide range of platforms, languages, and domains.





Products

GET /api/Products

Parameters Try it out

No parameters

Responses

Code	Description	Links
200	Success	No links

Media type:

Controls: Accept header.

Example Value | Schema

```
{  "productID": 0,  "productName": "string",  "price": 0}
```

POST

/api/Products

Parameters

Try it out

No parameters

Request body

application/json

Example Value | Schema

```
{
  "productID": 0,
  "productName": "string",
  "price": 0,
  "brand": "string",
  "manufactureDate": "2022-07-08T18:23:21.645Z",
  "expirationDate": "2022-07-08T18:23:21.645Z"
}
```

Responses

Code	Description	Links
200	Success	No links

PUT

/api/Products/{id}

Parameters

Try it out

Name	Description
id * required integer(int32) (path)	<input type="text" value="id"/>

Request body

application/json

Example Value | Schema

```
{
  "productID": 0,
  "productName": "string",
  "price": 0,
  "brand": "string",
  "manufactureDate": "2022-07-08T18:24:24.744Z",
  "expirationDate": "2022-07-08T18:24:24.744Z"
}
```

Responses

DELETE

/api/Products/{id}

Parameters

Try it out

Name	Description
id * required integer(int32) (path)	<input type="text" value="id"/>

Responses

Code	Description	Links
200	Success	No links

6.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.

- You might write a simple query that returns a set of records and then use features of Log Analytics to sort, filter, and analyze them. Or you might write a more advanced query to perform statistical analysis and visualize the results in a chart to identify a particular trend.
- If you start Log Analytics from the **Azure Monitor** menu or the **Log Analytics workspaces** menu, you'll have access to all the records in a workspace. If you select **Logs** from another type of resource, your data will be limited to log data for that resource. For more information, see [Log query scope and time range in Azure Monitor Log Analytics](#).

How Logs work by using Query language as shown in bellow images.

- Open Azure portal and click on Logs.
- Select the Tables what you check.
- Write a query logic and click on Run.

Overview - Azure App S... | Azure Functions Over... | Overview for Azure L... | MiniProject20220708... | https://zenfun24.azure... | miniproject20220708... | +

portal.azure.com/#@Shubhammuchalambe2405outloo.onmicrosoft.com/resource/subscriptions/b38778e0-f6b5-4f87-9ee5-3594db0f1224/resourceGroup... | Update

Gmail | YouTube | Maps

Microsoft Azure | Search resources, services, and docs (G+)

Home > App Services > MiniProject20220708122854

MiniProject20220708122854 | Logs

App Service

logs

Activity log

Diagnose and solve problems

Deployment

Deployment slots

Settings

Authentication

Monitoring

Logs

App Service logs

Log stream

Automation

Tasks (preview)

New Query 1

MiniProject20220... | Select scope | Run | Time range: Last 24 hours | Save | Share | New alert rule

1 Type your query here or click one of the queries to start

No data found

This might happen if

- No logs are configured. [Configure logs in diagnostic settings](#) or [learn more about logs configuration](#)
- The resource is still ingesting logs. [Learn more](#)

Schema and Filter

Feedback | Queries | Settings

Overview for Azure Logic Apps... | MiniProject20220708122854 - M... | https://zenfun24.azurewebsites.in... | Logs - Microsoft Azure

portal.azure.com/#view/Microsoft_Azure_Monitoring_Logs/DemoLogsBlade | Update

Gmail | YouTube | Maps

Microsoft Azure | Search resources, services, and docs (G+)

Home >

Logs

Demo

Tables | Queries | Functions

Search

Filter | Group by: Solution

Collapse all

Favorites

You can add favorites by clicking on the star icon

Active Directory Health Check

- ADAssessmentRecommendati...

Azure Monitor for VMs

Change Tracking

ContainerInsights

LogManagement

Network Performance Monitor

Security and Audit

SecurityCenterFree

ADAssessmentRecommendation

Use in editor

Description

Recommendations generated by AD assessments that are started through a scheduled task. When you schedule the assessment it runs by default every 7 days and upload the data into Azure Log Analytics

Tags

Useful links

[ADAssessmentRecommendation](#)

See preview data

0 queries history

To start, go to Queries on the side pane or type a query in the query

Home > **Logs** Demo

New Query 1* x + Feedback Queries Settings

Demo Run Time range: Last 7 days Save Share New alert rule Export Pin to Format query

1 ADAssessmentRecommendation |where _ResourceId contains "ab"

Tables Queries Functions ... <

Search Filter Group by: Solution Collapse all

Favorites

You can add favorites by clicking on the star icon

Active Directory Health Check

- ADAssessmentRecommendati...

Azure Monitor for VMs

Change Tracking

ContainerInsights

LogManagement

Results Chart

TimeGenerated [UTC]	AssessmentId	AssessmentName	RecommendationId	Recommendation
> 7/5/2022, 9:52:30.696 AM	22141292-68bc-4904-b030-5e894a7b1cb3	AD	e1fc9908-1810-455a-97de-5f5738141eb	Resolve Directory System
> 7/5/2022, 9:52:30.726 AM	22141292-68bc-4904-b030-5e894a7b1cb3	AD	c6eb7e0c-b86a-438f-9dce-9b0f50293dc9	Unless specifically requi
> 7/5/2022, 9:52:30.726 AM	22141292-68bc-4904-b030-5e894a7b1cb3	AD	4eabc96c-682a-4d81-9919-0c32af52aa3f	Amend dynamic port cc
> 7/5/2022, 9:52:30.726 AM	22141292-68bc-4904-b030-5e894a7b1cb3	AD	f676b73a-7a9b-4358-962f-60b4c3569536	Dynamic Port Ranges C
> 7/5/2022, 9:52:30.726 AM	22141292-68bc-4904-b030-5e894a7b1cb3	AD	11d49a22-7cad-43b7-81cf-f466c7f77189	Amend dynamic port cc
> 7/5/2022, 9:52:30.726 AM	22141292-68bc-4904-b030-5e894a7b1cb3	AD	d8640839-78cd-45a1-a942-10b536923f52	Domain Controllers witl

