

Deploying the static website in azure Storage account and ChatBot

Project overview:Deploying the static website in azure storage account and chatbot.

Project Goal:

Deploying a responsive and user-friendly static website using Azure Storage Account with seamless chatbot integration for interactive user engagement and support.

Project Scope:

- **Static Website:** A website that consists of HTML, CSS, and JavaScript files. These files are pre-rendered and don't require server-side processing.
- **Azure Storage Account:** A cloud storage solution for storing large amounts of unstructured data, including text, images, videos, and more. It can also host static websites.
- **Azure CLI:** A command-line interface for managing Azure resources.
- **ARM Templates:** JSON-based templates that define the infrastructure to be deployed.

Technologies and Azure Services Used:

1. **ARM Templates:** Used to automate the deployment of resources including Azure Storage Accounts, Azure Bot Services for the static website and chatbot.
2. **Azure CLI:** Can be used in combination with ARM templates for initial setup or to perform additional configurations that are not covered by the ARM template.

3. **Azure Storage Account:** ARM template provisions and configures the storage account to enable static website hosting, including creating the \$web container.
4. **Azure Bot Service:** provides a comprehensive environment for building, deploying, and managing chatbots. It includes integrated tools to handle both the backend and frontend aspects of chatbot development.
5. **Web Chat Channel:** Used to integrate the chatbot with your website or web application, enabling users to interact with the bot directly from a webpage.
6. **The Direct Line Channel:** provides a simple, secure communication line between the bot and external applications (like mobile apps or websites). It can be embedded into a website or mobile app for real-time chat functionality.

Project Approach:

1. Download and install the Azure CLI from the official website.
2. Login into the Azure portal by using the command `az login`.

```
PS C:\Users\keert> az login
A web browser has been opened at https://login.microsoftonline.com/organizations/oauth2/v2.0/authorize. Please continue the login in
the web browser. If no web browser is available or if the web browser fails to open, use device code flow with 'az login --use-device
-code'.
```

3. Create a resource group using Azure CLI command.
[`az group create -n <resource-group-name> -l <location-name>`]

```
PowerShell 7 (x64)
PS C:\Users\keert\OneDrive\Desktop\dummy> az group create -n trio -l australiaeast
```

The resource group with “trio” is created in portal.

Microsoft Azure

Home > Resource groups

Default Directory (priyaakula1808@gmail.onmicrosoft.com)

+ Create Manage view Refresh Export to CSV Open query Assign tags

You are viewing a new version of Browse experience. Some features may be missing. Click here to access the old experience.

Filter for any field... Subscription equals all Location equals all Add filter

Name	Subscription	Location
DefaultResourceGroup-CID	Free Trial	Central India
NetworkWatcherRG	Free Trial	Australia Central
RG1	Free Trial	Central India
sss	Free Trial	Korea Central
trio	Free Trial	Australia East

4. Create an ARM template by defining your infrastructure resources in a JSON format.

```

1 {
2   "$schema": "https://schema.management.azure.com/schemas/2019-04-01/deploymentTemplate.json#",
3   "contentVersion": "1.0.0.0",
4   "resources": [
5     {
6       "type": "Microsoft.Storage/storageAccounts",
7       "apiVersion": "2022-09-01",
8       "name": "[parameters('storageAccountName')]",
9       "location": "[resourceGroup().location]",
10      "sku": {
11        "name": "Standard_LRS"
12      },
13      "kind": "StorageV2",
14      "properties": {
15        "supportsHttpsTrafficOnly": true,
16        "isHnsEnabled": false,
17        "allowBlobPublicAccess": true
18      }
19    },
20    {
21      "type": "Microsoft.Storage/storageAccounts/blobServices/containers",
22      "apiVersion": "2022-09-01",
23      "name": "[format('{0}/default/$web', parameters('storageAccountName'))]",
24      "dependsOn": [
25        "[resourceId('Microsoft.Storage/storageAccounts', parameters('storageAccountName'))]"
26      ],
27      "properties": {}
28    }
29  ],

```

5. Deploy the ARM template by using Azure CLI command.

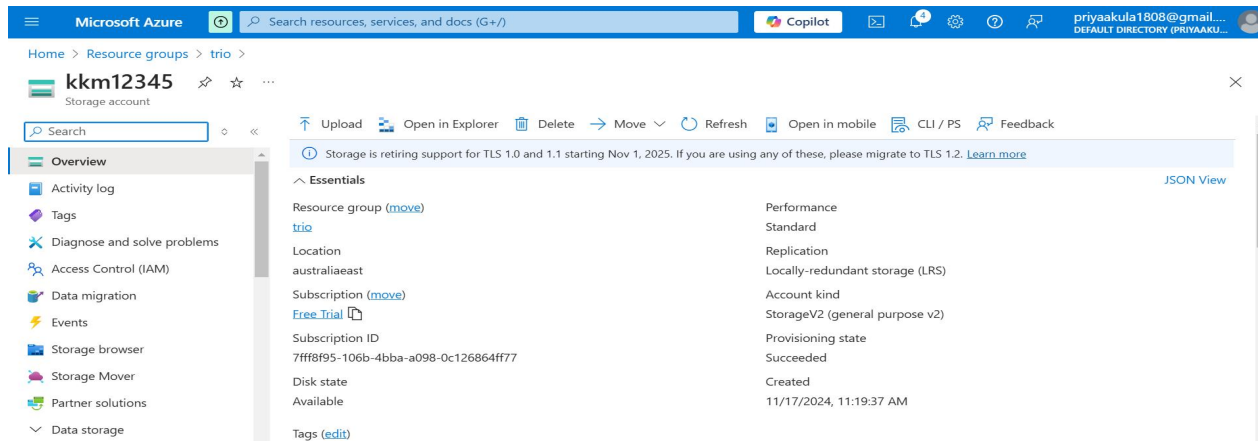
```
[az deployment group create --resource-group
<RESOURCE_GROUP_NAME> --template-file
storageAccountWithWeb.json --parameters
storageAccountName=<STORAGE_ACCOUNT_NAME>]
```

```

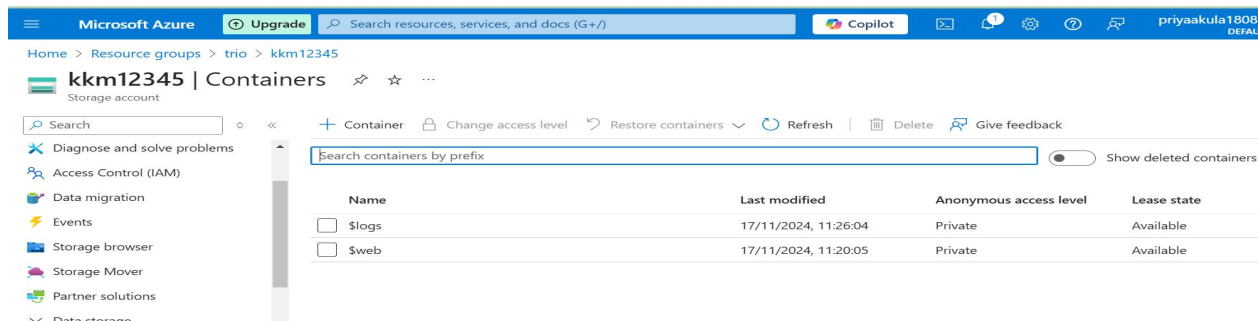
PS C:\Users\keert\OneDrive\Desktop\dummy> az deployment group create --resource-group trio --template-file str.json --parameters stor
ageAccountName=kkm12345

```

The storage account “kkm12345” is created in the resource group “trio” in the azure portal.

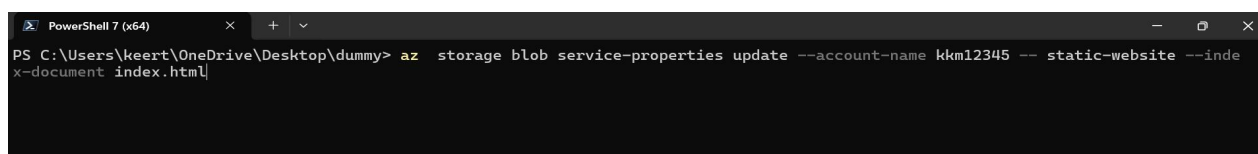


The container \$web is created in the storage account “kkm12345” in the Azure portal.

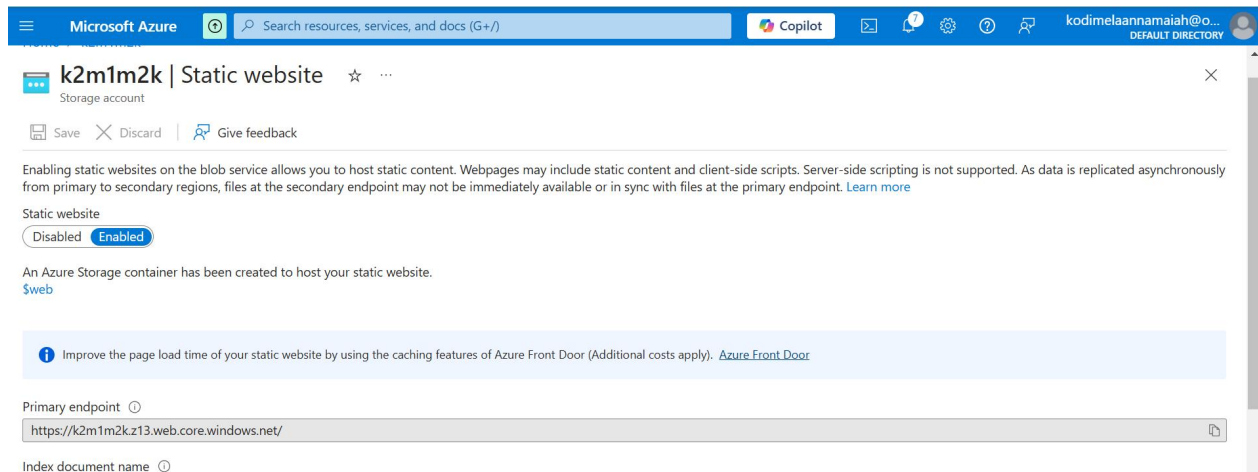


6. Enable the static website using Azure CLI command.

```
[az storage blob service-properties update --account-name  
<STORAGE_ACCOUNT_NAME> --static-website --index-document  
index.html ]
```

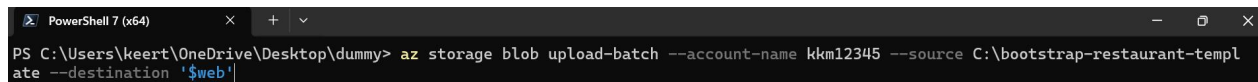


We can see the static website is enabled in azure portal.

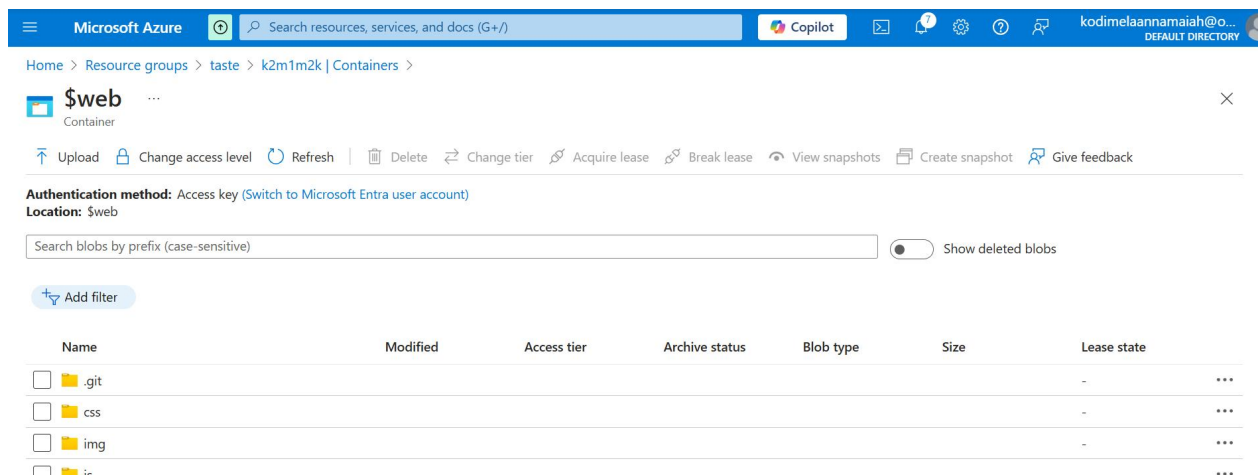


7. Upload the website file using Azure CLI command.

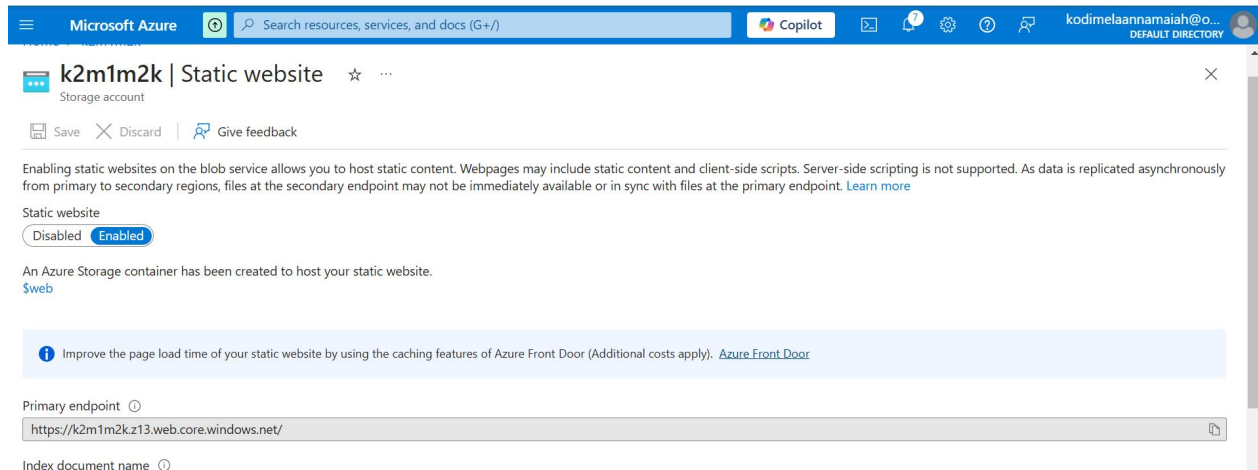
```
[az storage blob upload-batch --account-name  
<STORAGE_ACCOUNT_NAME> --source  
<SOURCE_DIRECTORY> --destination '$web']
```



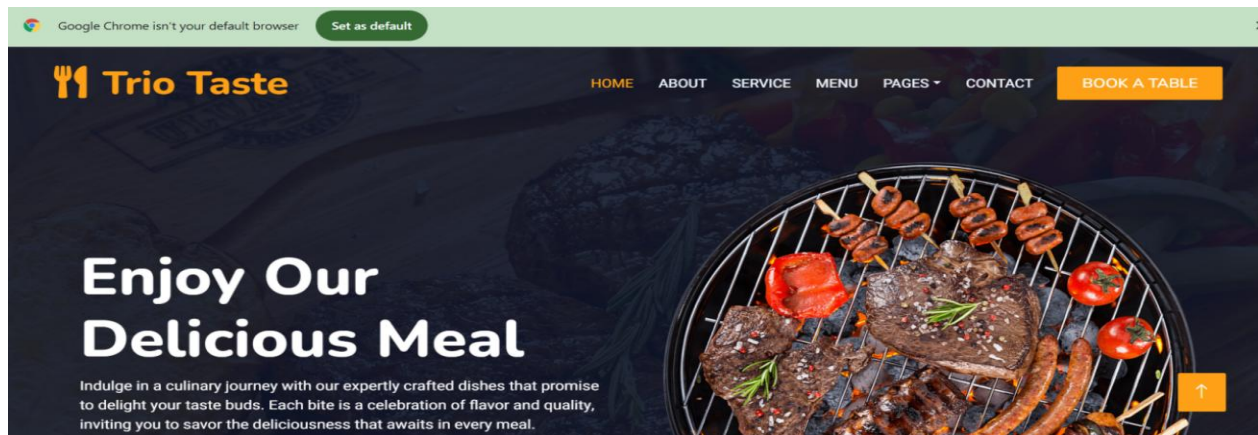
When we open the azure portal we can see that the website files are uploaded.



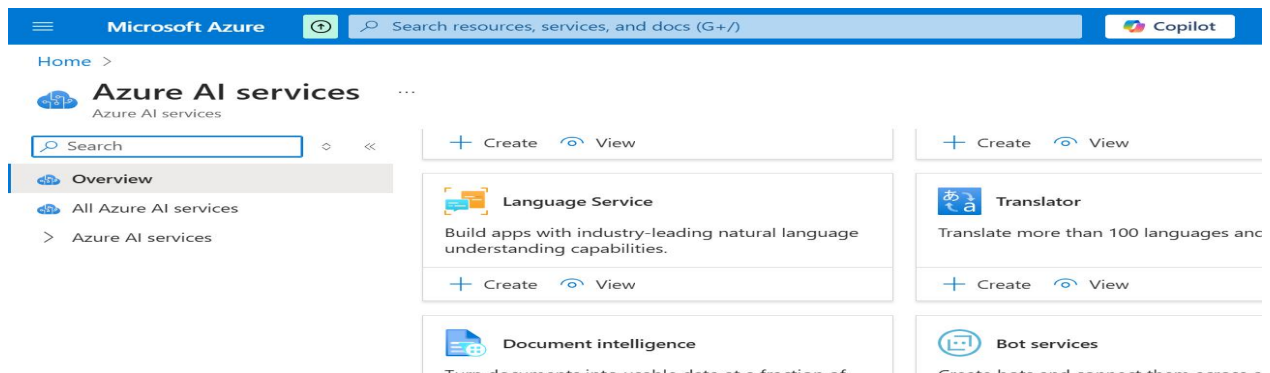
8. You can access your static website using the endpoint provided by Azure. Paste the endpoint in the browser.



When the private endpoint is pasted in the browser the website is opened as follows,



9. In Azure portal search azure ai services and create a language service.



10.The language service “kkmlang” is created .

Microsoft Azure

Search resources, services, and docs (G+)

Copilot

priyaakula1808@gmail.com
DEFAULT DIRECTORY (PRIYAARU)

Home >

kkmlang
Language

Search

Delete

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Resource Management

Security

Monitoring

Automation

Help

Essentials

Resource group (move)

trig

Status

Active

Location

Australia East

Subscription (move)

Free Trial

Subscription ID

7ff8f95-106b-4bba-a098-0c126864ff77

Tags (edit)

Add tags

See more

API Kind

TextAnalytics

Pricing tier

Standard

Endpoint

https://kkmlang.cognitiveservices.azure.com/

Manage keys

Click here to manage keys

Autoscale

Disabled

JSON View

Get Started Discover Develop Deploy

11.Create language studio in Azure portal.

Azure AI | Language Studio

priyaakula1808@gmail.com
kkmlang (australiaeast, S)

Language Studio

Settings

Directory Resources General

In order to sign in to the Language Studio and use the Language Service, you need to have a Language Azure resource. A Language resource's endpoint and key are used to query prebuilt features and author custom models. [Learn more about Azure resources.](#)

Current Subscription: Free Trial

Current Language resource: kkmlang

Search

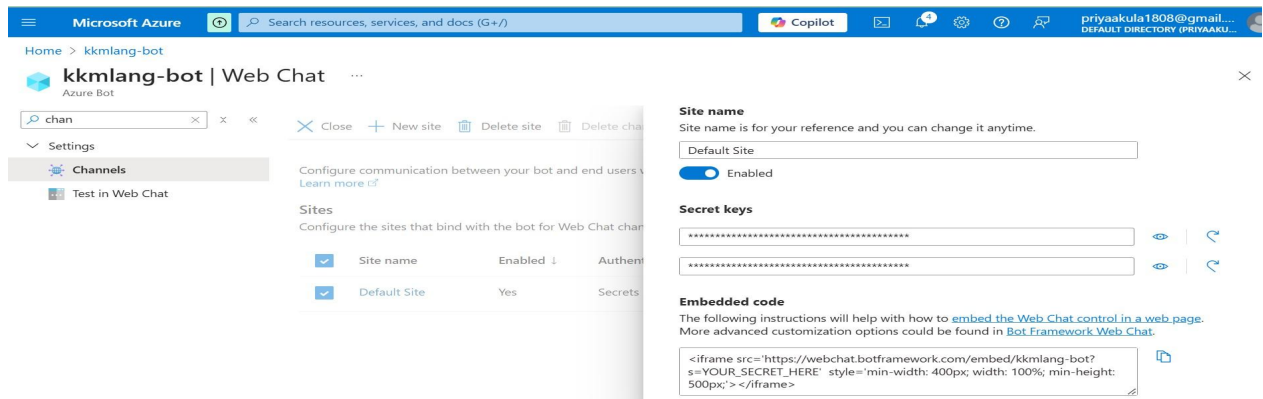
+ Create a new resource

Resource name	Region	Managed ide...	Pricing tier	Resource key
kkmlang	australiaeast	Enabled	S	*****

12. Deploy a file like excel sheet which contains question and answers.

Of course , you can		
	A	B
1	Where did the trio Tasted restaurant located??	Near NTR statue ,Boduppall
2	Do you provide online services??	Yes we do
3	What are your most popular dishes ?	Chicken lollipop,butter chicken,ghee karam idli,Chicken biryani
4	Do you offer discounts ??	Yes we do
5	Do you accept credit cards, digital wallets, or cash-only?	Yes we accept
6	What are your opening and closing hours?	9am - 9 pm
7	How do I track my delivery order?	You can call to this number 9012345842
8	How can I provide feedback about my experience?	triotaste2010@gmail.com
9	How can I contact the manager or owner?	you can call to this number 9012345842
10	Do you provide catering services?	Yes we do
11	What are your peak hours?	weekends
12	Are your ingredients fresh and locally sourced?	Yes they are always fresh
13	Can I customize my order for takeout or delivery?	Of course , you can
14		
15		
16		
17		
18		

13. Navigate to channels section and click on web chat ,you will get a screate key and script copy them ,Then go to \$web container in which it has index.html file paste the script and secrete key in that and save it.



Microsoft Azure

Search resources, services, and docs (G+)

Copilot

Home > kkmlang-bot

kkmlang-bot | Web Chat

Settings

Channels

Test in Web Chat

Configure communication between your bot and end users v

Learn more

Sites

Configure the sites that bind with the bot for Web Chat chan

Site name

Site name is for your reference and you can change it anytime.

Default Site

Enabled

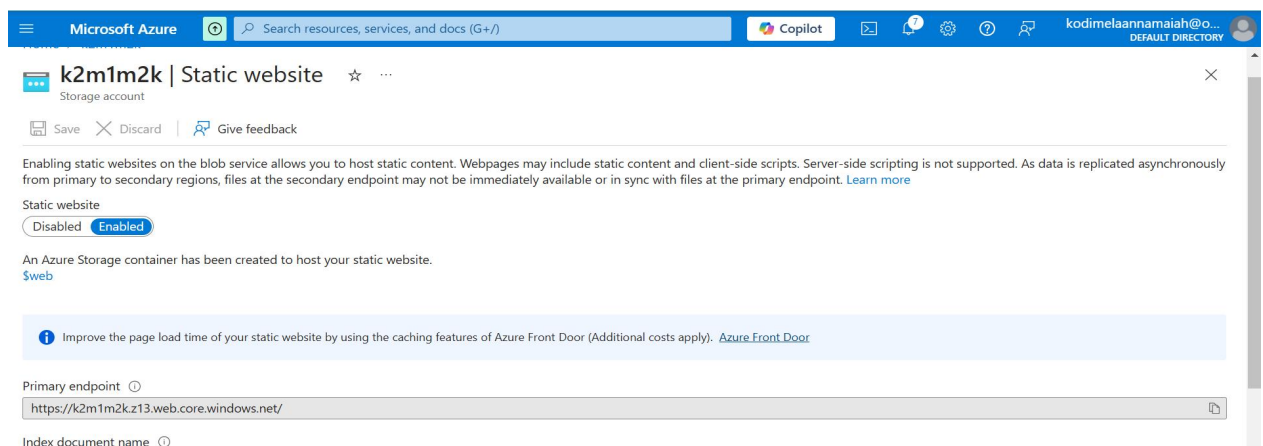
Secret keys

Embedded code

The following instructions will help with how to [embed the Web Chat control in a web page](#). More advanced customization options could be found in [Bot Framework Web Chat](#).

```
<iframe src="https://webchat.botframework.com/embed/kkmlang-bot?s=YOUR_SECRET_HERE" style="min-width: 400px; width: 100%; min-height: 500px;"></iframe>
```

14. Paste the primary endpoint in the browser.



Microsoft Azure

Search resources, services, and docs (G+)

Copilot

Home > k2m1m2k

k2m1m2k | Static website

Static website

Disabled Enabled

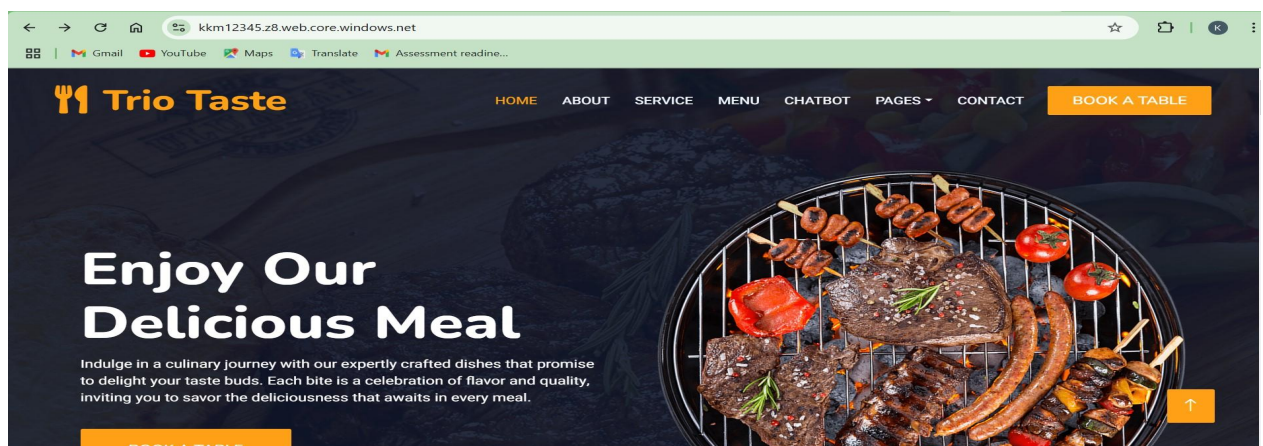
An Azure Storage container has been created to host your static website.

Primary endpoint

<https://k2m1m2k.z13.web.core.windows.net/>

Index document name

We wil get our website with chatbot option.



kkml2345.z8.web.core.windows.net

Gmail YouTube Maps Translate Assessment readine...

Trio Taste

HOME ABOUT SERVICE MENU CHATBOT PAGES CONTACT

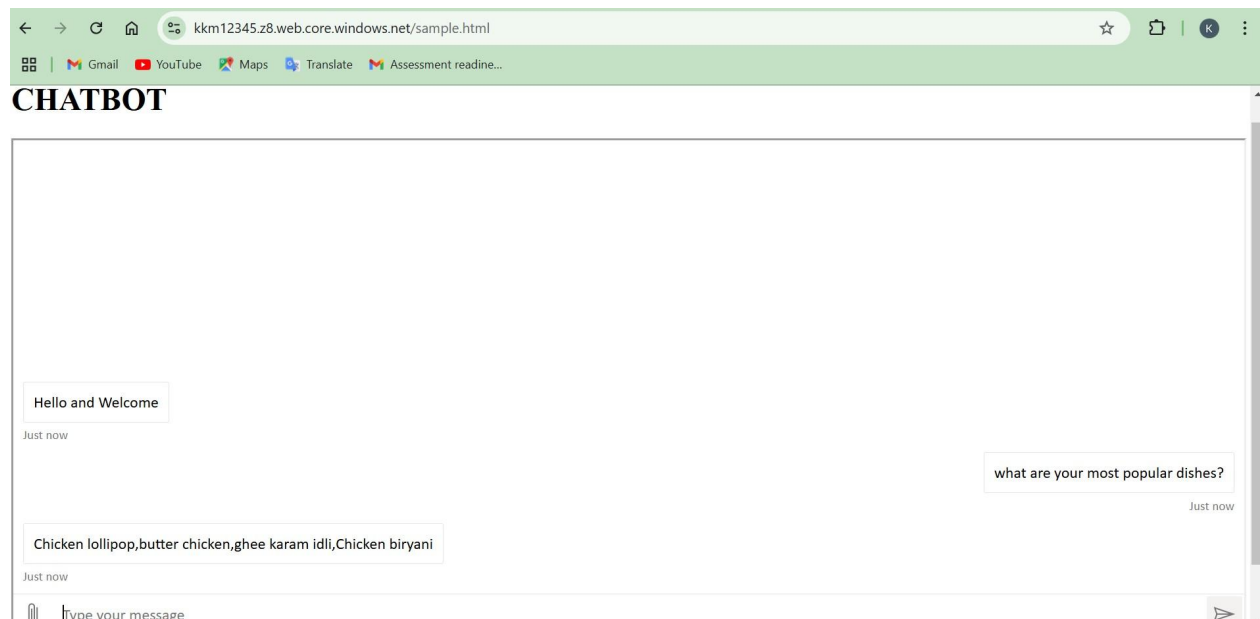
BOOK A TABLE

Enjoy Our Delicious Meal

Indulge in a culinary journey with our expertly crafted dishes that promise to delight your taste buds. Each bite is a celebration of flavor and quality, inviting you to savor the deliciousness that awaits in every meal.

BOOK A TABLE

When we click on chatbot , and provide a question from excel sheet we will get as follows:



Conclusion:

In this project, we successfully deployed a static website in an Azure Storage Account and integrated a chatbot powered by Azure's Language Services. This solution combines two powerful Azure services: Storage Accounts for hosting static web content and Azure Bot Services for building and deploying intelligent chatbots.