
TalkToMeBOT-A Mental Health ChatBot

Problem Statement:

A good percentage of people suffer from mental health problems but they lack the knowledge and awareness to cure it. When left untreated, mental health problems can lead to poor academic or work performance, higher medical expenses, increased risk of suicide, fewer employment opportunities, etc.

Description

TalkToMeBOT is a Mental Health ChatBot where people can get answers to their questions and doubts like what is mental illness? How to cure mental illness? Suicide prevention and many more regarding mental health and can also get resources for further help. The ChatBot aims to promote mental health awareness. This chatbot is built using Azure AI/ML services. QnA Maker is a cloud-based Natural Language Processing (NLP) service that allows you to create a natural conversational layer over your data. It is used to find the most appropriate answer for any input from your custom knowledge base (KB) of information. The ChatBot uses Azure QnA maker which helps in storing FAQs and answers to potential questions that can be asked by the user and Azure Bot Service which provides artificial intelligence (AI) chatbot which helps in providing an interactive environment to the user. It also uses HTML and CSS for webpage design. The code is written on Visual Studio Code and is deployed using Github.

Project Objectives

The main objectives of the project are as follows:

1. To provide users with accurate and helpful information about mental health
2. To provide a friendly and engaging chatbot interface
3. To provide jokes to cheer up people who may be feeling down

Architecture

The FRT_Final_Project is built using the following technologies:

Azure QnA services: used for providing accurate and helpful information about mental health

Azure Bot services: used for handling user inputs and providing appropriate responses

Python: used as the main programming language

The chatbot architecture is based on a question-answer model, where the user inputs a question or statement, and the chatbot provides a response based on the input.

Screenshots:

Object Oriented Programming - X

Home - Microsoft Azure X

New File X

Basic writing and formatting synt X

portal.azure.com/#home

Microsoft Azure

Search resources, services, and docs (G+)

Create a resource

Resource groups

QnA makers

Subscriptions

Quickstart Center

Virtual machines






App Services

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Resources


Recent


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Name	Type
 TalkToMeBOT	Static Web App
 TalkToMeBOT	Resource group
 talktomebot-bot	Web App Bot
 talktomebot-bot-acb9	App Service
 TalkToMeBOT	QnA maker


See all

Navigate

 Subscriptions

 Resource groups


 All resources

 Da

https://portal.azure.com/#create/hub

Windows logo

Type here to search



1st step:Created azure serviices named TalkkToMeBot

2nd step:Created Azure QnA maker

Object Oriented Program x TalkToMeBOT - Microsoft x New File x Basic writing and format x How to Add Images

portal.azure.com/#@soumyogoagmail.onmicrosoft.com/resource/subscriptions/5c1a9d76-b71d-4972-8b3c-a793ad71ce95/resource

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

Home >

TalkToMeBOT QnA maker

Search (Ctrl+/) Delete

Overview

- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems

Resource Management

- Keys and Endpoint
- Pricing tier
- Networking
- Identity
- Cost analysis
- Properties
- Locks

Help us improve QnA Maker. Take our survey!

Essentials

Resource group (move)	API type
TalkToMeBOT	QnA Maker
Status	Pricing tier
Active	Free
Location	Endpoint
West US	https://talktomebot.cognitive
Subscription (move)	Manage keys
Azure for Students	Click here to manage keys
Subscription ID	
5c1a9d76-b71d-4972-8b3c-a793ad71ce95	
Tags (edit)	
Click here to add tags	

Get Started Monitoring

Type here to search

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3rd step:Created Azure Knowledge Base

Object Oriented Pro x | TalkToMeBOT - Mic x | QnA Maker x | New File x | Basic writing and fo x | How to Add I

qnamaker.ai/Home/MyServices

Cognitive Services | QnA Maker | My knowledge bases | Create a knowledge base

my knowledge bases

Migrate knowledge bases to Custom question answering

Custom question answering returns higher quality responses powered by a deep learning ranker, supports unstructured content, powers optional short answer languages and is available across multiple regions. To migrate your knowledge bases to Custom question answering, you should create a Language resource v

Start migration

Select tenant


soumyogoagmail (Default Director, v

Select subscription

All subscriptions v


Select service

All services v

Knowledge base name	Last modified	Last published	Sample Code	Azur
 Mental HEALTH	7/3/2022, 9:17:33 PM	7/3/2022, 9:18:26 PM	View Code	talk

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Object Oriented Pro xTalkToMeBOT - Mic xQnA Maker xNew File xBasic writing and fo xHow to Add Im

← → ↻ qnamaker.ai/Edit/KnowledgeBase?kbId=791b5845-4b93-4c72-b4a5-e68bf65ccffe&tenantId=a5d6b1dd-5350-4c5b-ba85-6d306d0f4

Cognitive Services | QnA MakerMy knowledge basesCreate a knowledge base

Mental HEALTH (Publisher)EDITPUBLISHSETTINGS

Knowledge base

Search the KB X81 QnA pairs+ Add

Enable rich editor ☒

12345

Question

Source: Editorial

What to do next? X

What can I do next? X

Where can I learn more? X

Which website has more information? X

Where can I get more information? X

Can you give me more information X

Answer

To check you knowledge attempt this quiz

<https://www.cdc.gov/mentalhealth/quiz/index>.

You can learn more about mental health from

<https://www.who.int/news-room/fact-sheets/d>

health-strengthening-our-response

+ Add follow-up prompt

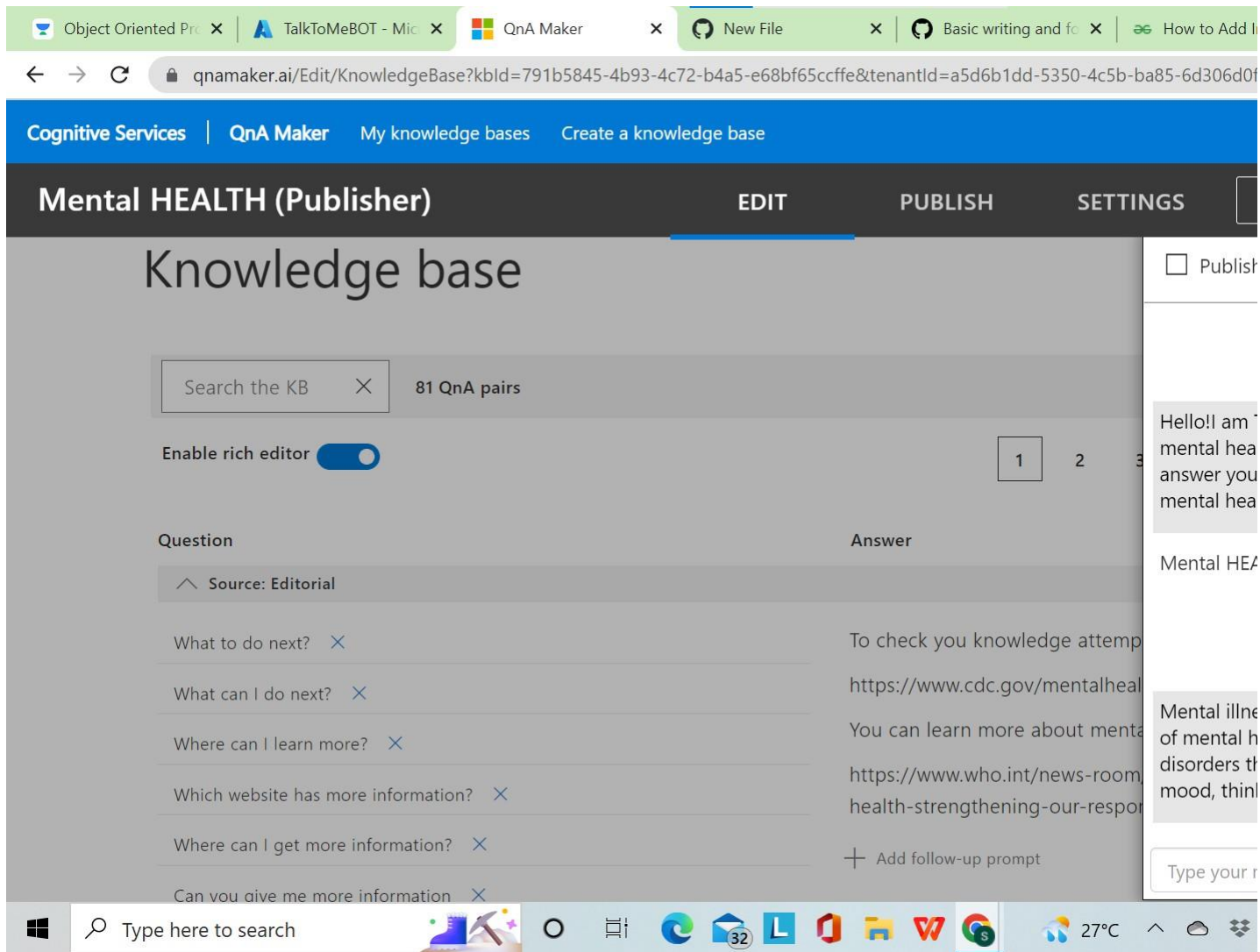
Windows Taskbar

Type here to search

Taskbar Icons

System Tray

4th step:Train the Bot using test feature



5th step:Publishing the Bot by creating Azure Bot

Mental HEALTH

Publishing your knowledge base moves your QnAs from the test index to the production index. Once your base endpoint becomes available for use in your Bot or App

This knowledge base will be published to the [talktomebot](#) QnA Maker service.

Cancel

Publish

Success! Your service has been deployed. What's next?

You can always find the deployment details in your service's settings.

Create Bot

[View](#) all your bots on the Azure Portal.

Use the below HTTP request to call your Knowledgebase. [Learn more.](#)

Postman Curl

```
POST /knowledgebases/791b5845-4b93-4c72-b4a5-e68bf65ccffe/generateAnswer
Host: https://talktomebot.azurewebsites.net/qnamaker
Authorization: EndpointKey 12129109-2903-49c6-8441-219de6adb2ba
Content-Type: application/json
{"question": "<Your question>"}
```


Object Oriented Pro x | talktomebot-bot - | x | QnA Maker x | Bot Services - Micro x | New File x | Basic writing

portal.azure.com/#view/HubsExtension/Resources/resourceType/Microsoft.BotService%2FbotServices

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

Home >

Bot Services

Default Directory

+ Create Edit columns Refresh Feedback Assign tags Delete

Subscriptions: Azure for Students

Filter by name... All resource groups All locations All tags No grouping

1 items

<input type="checkbox"/> Name ↑↓	Type ↑↓	Resource group ↑↓	Location ↑↓
<input type="checkbox"/> talktomebot-bot	Web App Bot	TalkToMeBOT	Global

Windows search bar: Type here to search

Taskbar: 27°C

6th step: Copying the Embedded code and Secret Key to HTML code to enable our chat bot to work

Object Oriented Pro x | talktomebot-bot - | x | QnA Maker x | talktomebot-bot - | x | New File x | Basic writing

portal.azure.com/#@soumyogoagmail.onmicrosoft.com/resource/subscriptions/5c1a9d76-b71d-4972-8b3c-a793ad71ce95/resource

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

Home > Bot Services > talktomebot-bot >

Bot Services

Default Directory

+ Create

Edit columns

...

Filter by name...

Name

↑↓

talktomebot-bot

...

talktomebot-bot | Web Chat

Web App Bot

Search (Ctrl+ /)

Overview

Activity log

Access control (IAM)

Tags

Settings

Bot profile

Configuration

Channels

Pricing

Test in Web Chat

Encryption

Networking

Properties

Configure the site

Secret keys

Embedded code

The following instructions will show more advanced instructions [more](#)

<iframe src='https://webchat.botframework.com/?secret=YOUR_SECRET_HERE' style='min-width: 400px; height: 500px;'></iframe>

Preview controls

Enabling Web Chat Preview on this site will give you a Framework Web Chat control. The preview version is currently in beta.

Apply

Cancel

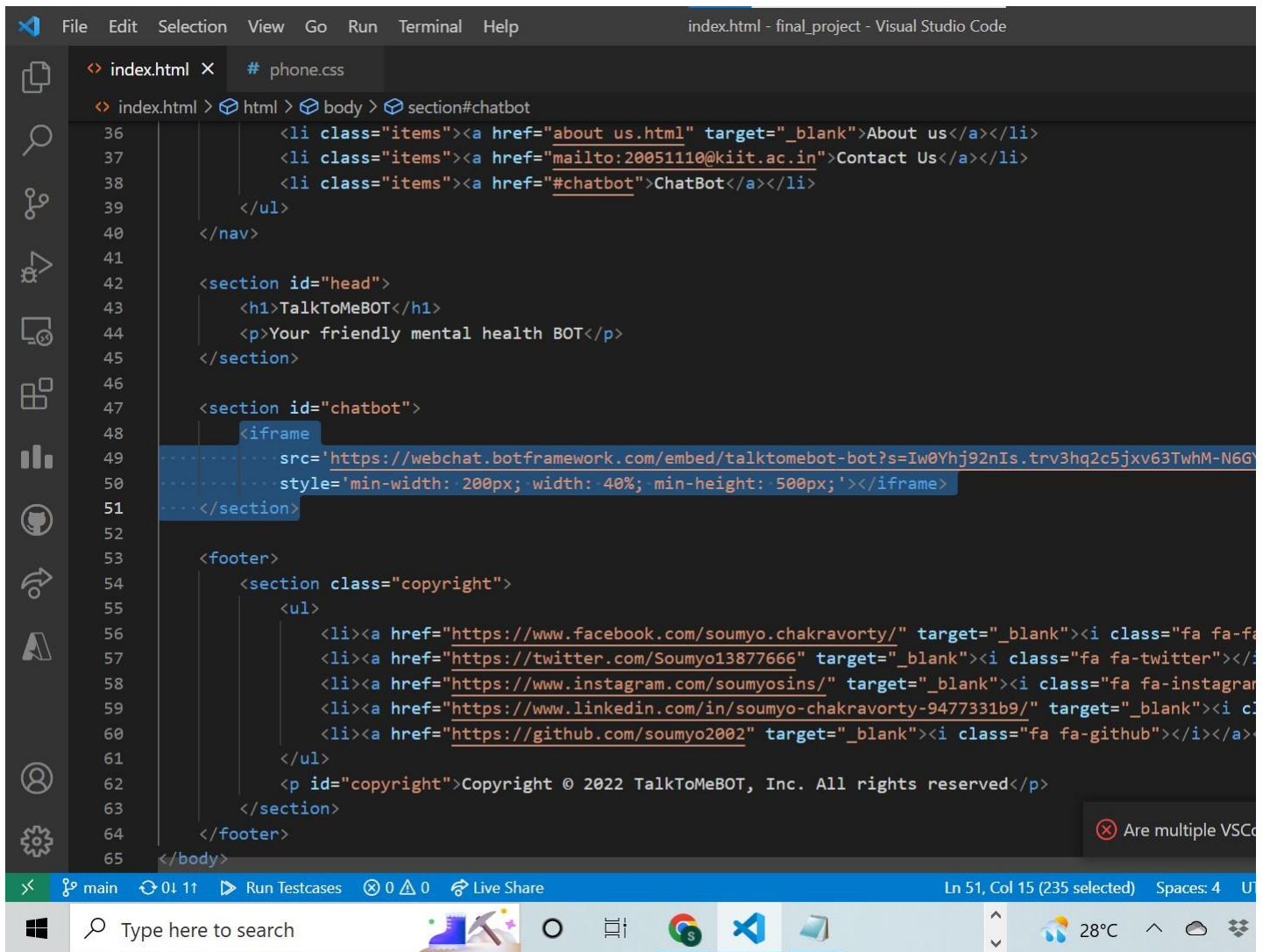
Type here to search

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27°C



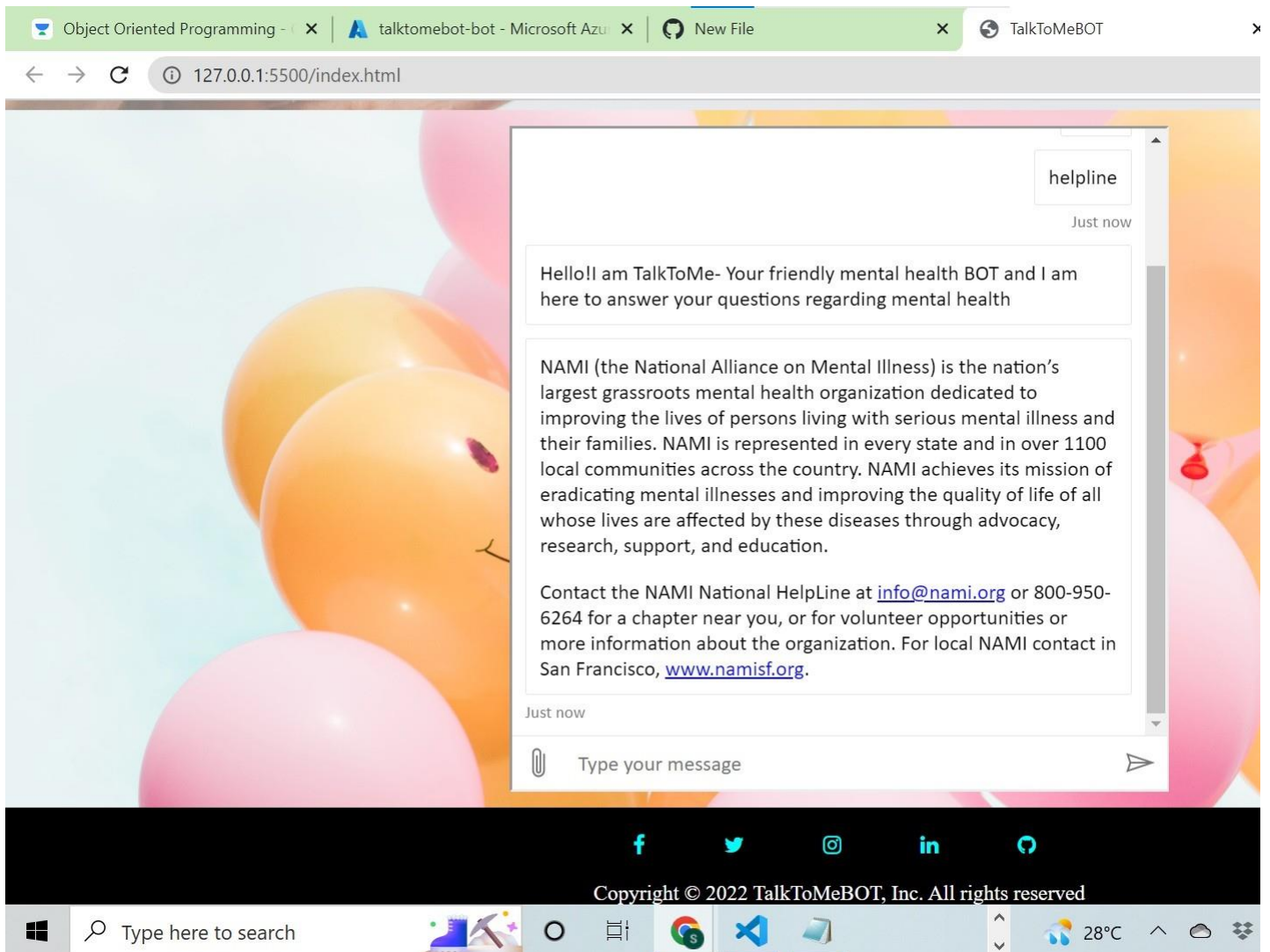
```
<?xml version="1.0" encoding="UTF-8" ?>
<html>
  <head>
    <title>TalkToMeBOT</title>
  </head>
  <body>
    <nav>
      <ul>
        <li class="items"><a href="about us.html" target="_blank">About us</a></li>
        <li class="items"><a href="mailto:20051110@kiit.ac.in">Contact Us</a></li>
        <li class="items"><a href="#chatbot">ChatBot</a></li>
      </ul>
    </nav>

    <section id="head">
      <h1>TalkToMeBOT</h1>
      <p>Your friendly mental health BOT</p>
    </section>

    <section id="chatbot">
      <iframe
        .....src='https://webchat.botframework.com/embed/talktomebot-bot?s=Iw0Yhj92nIs.trv3hq2c5jxv63TwhM-N6G'
        .....style='min-width: 200px; width: 40%; min-height: 500px;'></iframe>
    </section>

    <footer>
      <section class="copyright">
        <ul>
          <li><a href="https://www.facebook.com/soumyo.chakravorty/" target="_blank"><i class="fa fa-fa-
          <li><a href="https://twitter.com/Soumyo13877666" target="_blank"><i class="fa fa-twitter"></i>
          <li><a href="https://www.instagram.com/soumyosins/" target="_blank"><i class="fa fa-instagram"></i>
          <li><a href="https://www.linkedin.com/in/soumyo-chakravorty-9477331b9/" target="_blank"><i c
          <li><a href="https://github.com/soumyo2002" target="_blank"><i class="fa fa-github"></i></a>
        </ul>
        <p id="copyright">Copyright © 2022 TalkToMeBOT, Inc. All rights reserved</p>
      </section>
    </footer>
  </body>
</html>
```

7th step: Testing if the bot is working or not



8th step: Created Static web app

Object Oriented Programming - x TalkToMeBOT - Microsoft Azure x New File x +

portal.azure.com/#@soumyogoagmail.onmicrosoft.com/resource/subscriptions/5c1a9d76-b71d-4972-8b3c-a793ad71ce95/resource

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

Home >

TalkToMeBOT ☆ ...
Static Web App

Search (Ctrl+/) << Browse Delete Manage deployment token Send us your feedback

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Access control (IAM)

Tags

Settings

Configuration

Application Insights

Custom domains

APIs

Environments

Role management

Identity

Enterprise-grade edge (Preview)

Hosting Plan

Essentials

Resource group (move)
[TalkToMeBOT](#)

Subscription (move)
[Azure for Students](#)

Subscription ID
5c1a9d76-b71d-4972-8b3c-a793ad71ce95

Location
Global

Sku
Free

Tags (edit)
[Click here to add tags](#)

URL
<https://black-bush-0aa1b461>

Source
[main \(GitHub\)](#)

Deployment history
[GitHub Action runs](#)

Edit workflow
[azure-static-web-apps-black-](#)

Requests Data out

Type here to search

28°C

9th step: Static web app successfully connected to GitHub

Object Oriented Programming - x | TalkToMeBOT - Microsoft Azure x | New File x | Actions · soumyo2002/FRT_Final_ x

github.com/soumyo2002/FRT_Final_Project/actions

<> Code Issues Pull requests **Actions** Projects Wiki Security Insights Settings

Workflows New workflow

All workflows

Azure Static Web Apps CI/CD

pages-build-deployment

All workflows

Showing runs from all workflows

Filter workflow runs

11 workflow runs Ever

- ✓ **Azure Static Web Apps CI/CD**
Azure Static Web Apps CI/CD #1: by soumyo2002 main
- ✓ **pages build and deployment**
pages-build-deployment #10: by github-pages bot
- ✓ **pages build and deployment**
pages-build-deployment #9: by github-pages bot
- ✓ **pages build and deployment**
pages-build-deployment #8: by github-pages bot
- ✓ **pages build and deployment**

Windows search bar: Type here to search

Taskbar: File Explorer, Edge, Chrome, VS Code, Weather (28°C)

Project Link:
https://soumyo2002.github.io/FRT_Final_Project/