

Using “PHP & Javascript” Created “Eat Healthy Web-app /Awareness towards good diet” with following Azure Service : WebApp Service, Azure Bot Service, Azure SQL Database Service, Azure QnA Maker Service

Problem Statement:

A balanced diet is necessary for both good nutrition and health. Now a days, Junk food is increased and people love to eat those food. A healthy diet helps to protect against malnutrition in all its forms. Many of the disease like heart attack, diabetes, diarrhea take place due to unhealthy diet. "Eat Healthy" is a web-app which encourages people to eat healthy and stay fit. This web-app will show healthy recipe with calories so that people can make it home rather eat junk foods. Awareness of healthy food is necessary for the upcoming generation. This website give a brief information about the diet labels and calories intake through that particular recipe. So, "Eat Healthy" focus to make people aware about healthy diet and cause of unhealthy diet.

Solution:

Using Microsoft Azure QnA Maker service, Bot service, Web-app Service and SQL Database service as per the above problem statement.

Overall website is to aware people and individuals to eat healthy and stay fit. **Azure bot service & QnA maker** helps to create a healthy and smart bot which can interact with the people with different FAQ. Azure bot service creates a bot in the cloud which is secure and efficient with accurate answering the query. An integrated development environment for constructing bots is offered by **Azure Bot Service**. Best part of implementing bot using bot service is because it is fully hosted in low-code platform, without writing a line of code.

Azure SQL Database service connect the sql database of local machine and host it into the cloud database with accurate storing data. Implementing **Azure SQL Database** server-less makes performance management easier while assisting developers in creating apps more quickly and effectively by providing computing resources that scale automatically in response to workload requirements. Overall, web-app is hosted with the help of **Azure Web-app Service**. Hosting website with the help of cloud make it flexible and scalable.

You need following software/Azure account, find the link below:

Azure account:- create an account to use azure service for free from below link

<https://portal.azure.com/>

There is free credit for students and 200 \$ credit if you want to get started to Azure

<https://azure.microsoft.com/en-us/free/students/>

Visual Studio 2019 Community

<https://visualstudio.microsoft.com/downloads/>

Community edition is free for student and open source contributor for non commercial use.

Visual Studio Code (Optional if you have Visual Studio 2019 for Azure Function Development)

<https://code.visualstudio.com/download>

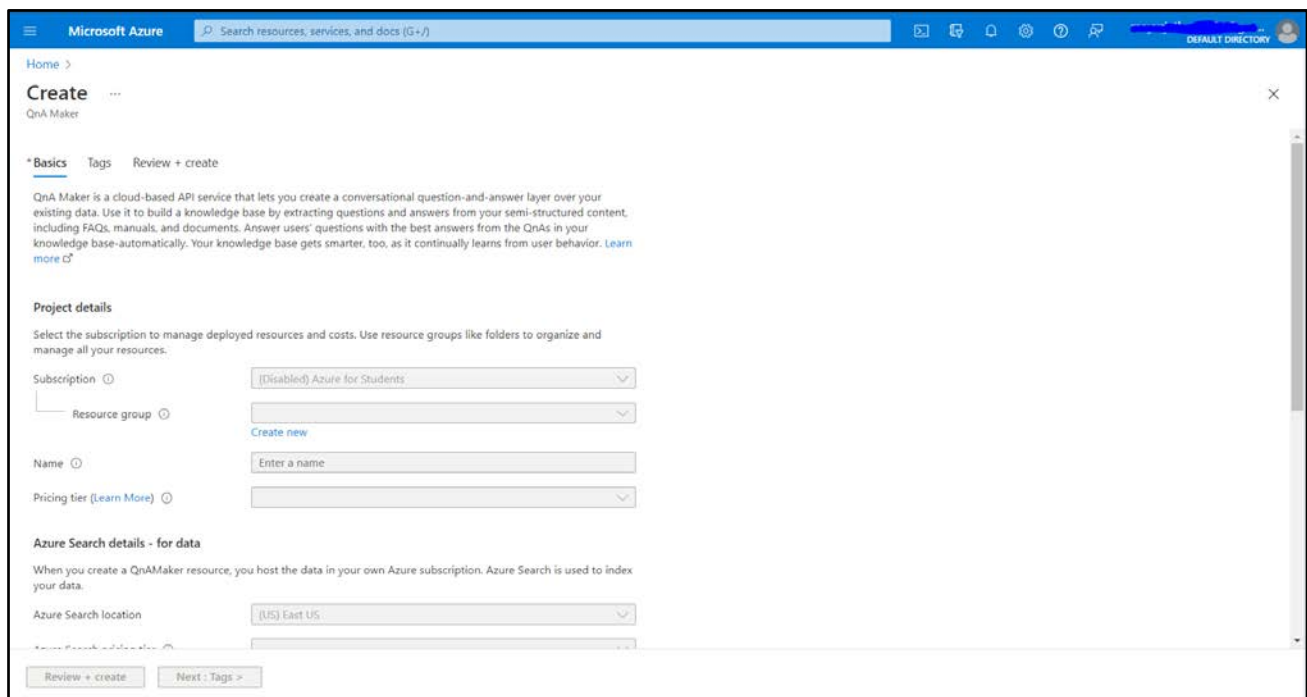
Services & how to use it:

QnA Maker Service

You can add a natural conversational layer over your data using the Natural Language Processing (NLP) tool **QnA Maker**, which is hosted in the cloud. It is used to locate the most suitable response for any input from your personalized knowledge base (KB) of data.

One can find the service doc from the below:

<https://learn.microsoft.com/en-us/azure/cognitive-services/qnamaker/overview/overview>

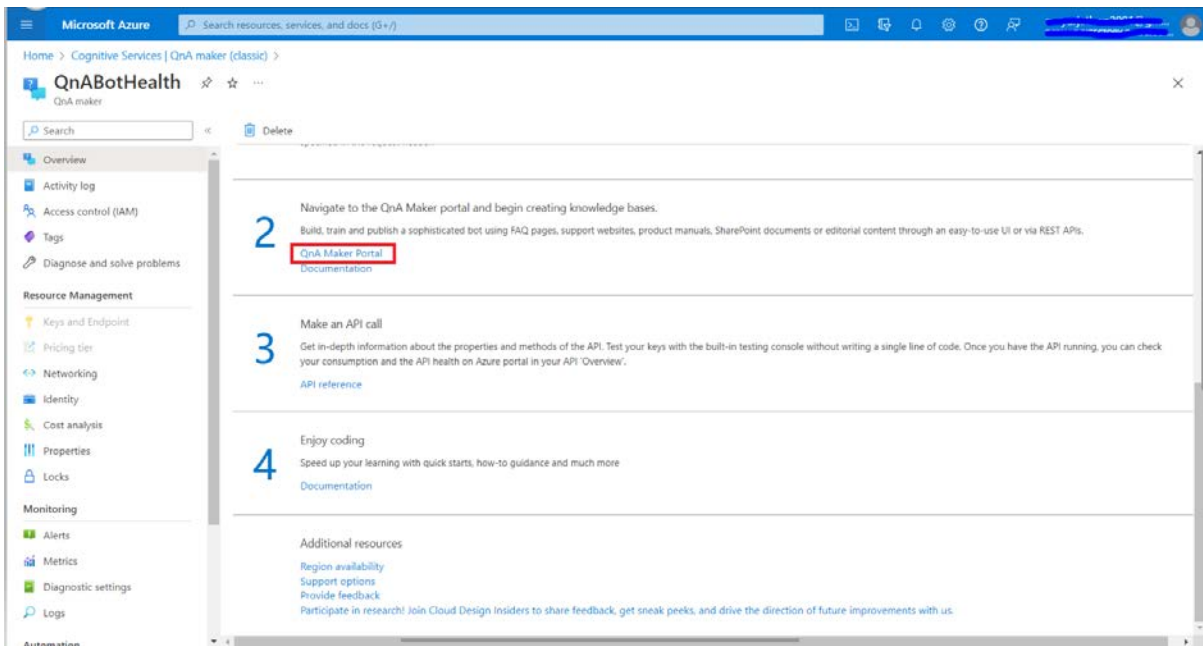


The screenshot shows the 'Create QnA Maker' page in the Microsoft Azure portal. The page is titled 'Create QnA Maker' and has a 'Basics' tab selected. Below the title, there is a brief description of QnA Maker. The 'Project details' section contains the following fields:

- Subscription: (Disabled) Azure for Students
- Resource group: [Empty]
- Name: Enter a name
- Pricing tier: [Empty]
- Azure Search location: (US) East US

At the bottom of the form, there are two buttons: 'Review + create' and 'Next: Tags >'.

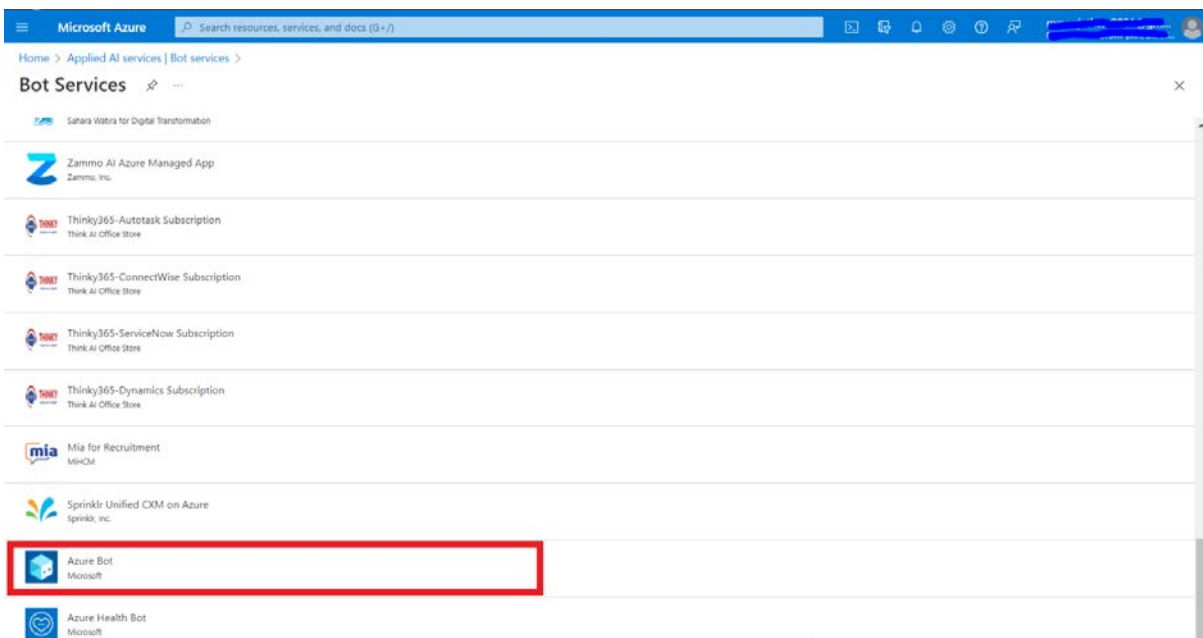
- Search for QnA Maker and Enter the required details.
- Click **Review + create** and create.
- After the QnA maker is created click and go to QnA Maker portal
- In QnA Maker portal enter required credentials and create a Knowledge base.
- Enter the Questions and answer for the bot according to the requirements.



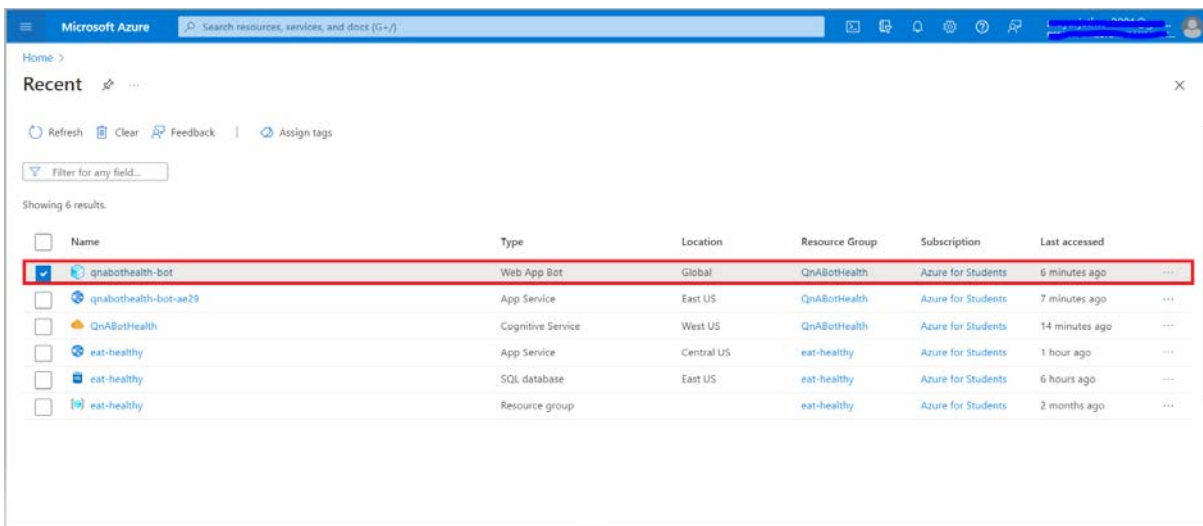
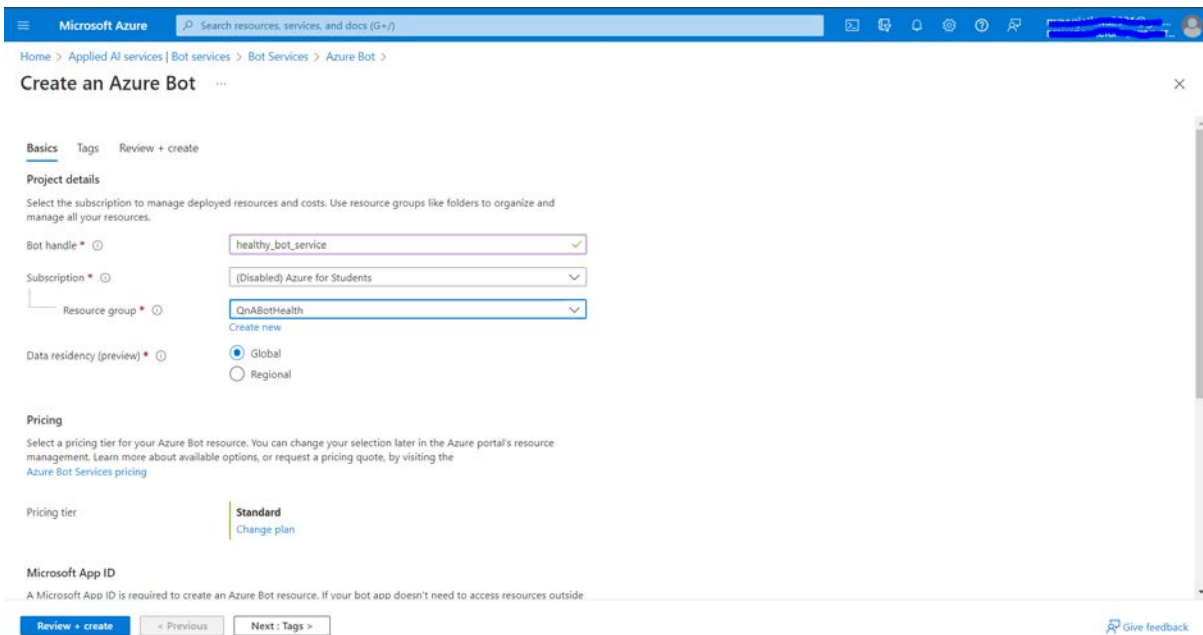
Azure Bot Service

The Azure Bot service is an AI chatbot that offers a variety of ways to build bots utilising its fundamental tools, such as the Bot Framework SDK for building bots and the bot service for connecting bots to channels.

<https://azure.microsoft.com/en-in/products/bot-services/>



- Search for Bot Service and Select Azure Bot.
- Enter the required details and select data residency as Global.
- Click **Review + create** and create.



Azure Web-app Service

An HTTP-based service called Azure App Service is used to host mobile back ends, REST APIs, and online apps. It doesn't matter what language you prefer to programme in—.NET,.NET Core, Java, Ruby, Node.js, PHP, or Python—you may use it. Both Windows and Linux-based platforms provide the smooth scaling and operation of applications. App Service enhances your application's functionality by bringing Microsoft Azure's security, load balancing, autoscaling, and automated administration features.

<https://azure.microsoft.com/en-us/products/app-service/web/>

Microsoft Azure | Search resources, services, and docs (G+J) | DEFAULT DIRECTORY (MAVURET...)

Home > Create a resource >

Create Web App

Basics | Deployment | Networking | Monitoring | Tags | Review + create

App Service Web Apps lets you quickly build, deploy, and scale enterprise-grade web, mobile, and API apps running on any platform. Meet rigorous performance, scalability, security and compliance requirements while using a fully managed platform to perform infrastructure maintenance. [Learn more](#)

Project Details

Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription *

Resource Group * [Create new](#)

Instance Details

Need a database? [Try the new Web + Database experience.](#)

Name * azurewebsites.net

Publish * Code Docker Container Static Web App

Runtime stack * PHP 7.4 will reach EOL on 30/11/2022 [Learn More](#)

Operating System * Linux Windows

Region *

[Review + create](#) | [< Previous](#) | [Next: Deployment >](#)

(Before creating web-app service create a resource group.)

Once you visit the website search for Web App service in the portal. In the Basic tab enter the correct details :

Project Details:

- Select subscription eg. Azure for student which is free for student.
- Select resource group created previously or (can be created by clicking on create new below it).

Instance details:

- Enter the name you like to and select code option for publish
- Fill all the details as per your requirement and click on **Review+create**.
- Review all the details and then click on **Create**.
- After clicking on create it will start deploying the web app source.

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

Home > Create a resource >

Create Web App

Basics Deployment Networking Monitoring Tags **Review + create**

Summary

Web App
by Microsoft

Details

Subscription	bda4c496-2bb9-4b41-ac89-378b53c126a1
Resource Group	eat-healthy
Name	eat-healthy-demo
Publish	Code
Runtime stack	PHP 7.4

App Service Plan

Name	ASP-eathealthy-8c66
Operating System	Windows
Region	Central US
SKU	Free
ACU	Shared infrastructure
Memory	1 GB memory

Monitoring

Application Insights	Not enabled
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Create < Previous Next > Download a template for automation

Once it is deployed the portal will display , then go to the resource group in which the web app was created and click on the created app:

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

Azure services

Create a resource Bot Services Azure Health Bot QnA makers App Services Static Web Apps All resources Resource groups Quickstart Center More services

Resources

Recent Favorite

Name	Type	Last Viewed
eat-healthy	App Service	a few seconds ago
qnabothhealth-bot	Web App Bot	40 minutes ago
eat-healthy	SQL database	5 hours ago
eat-healthy	Resource group	3 months ago

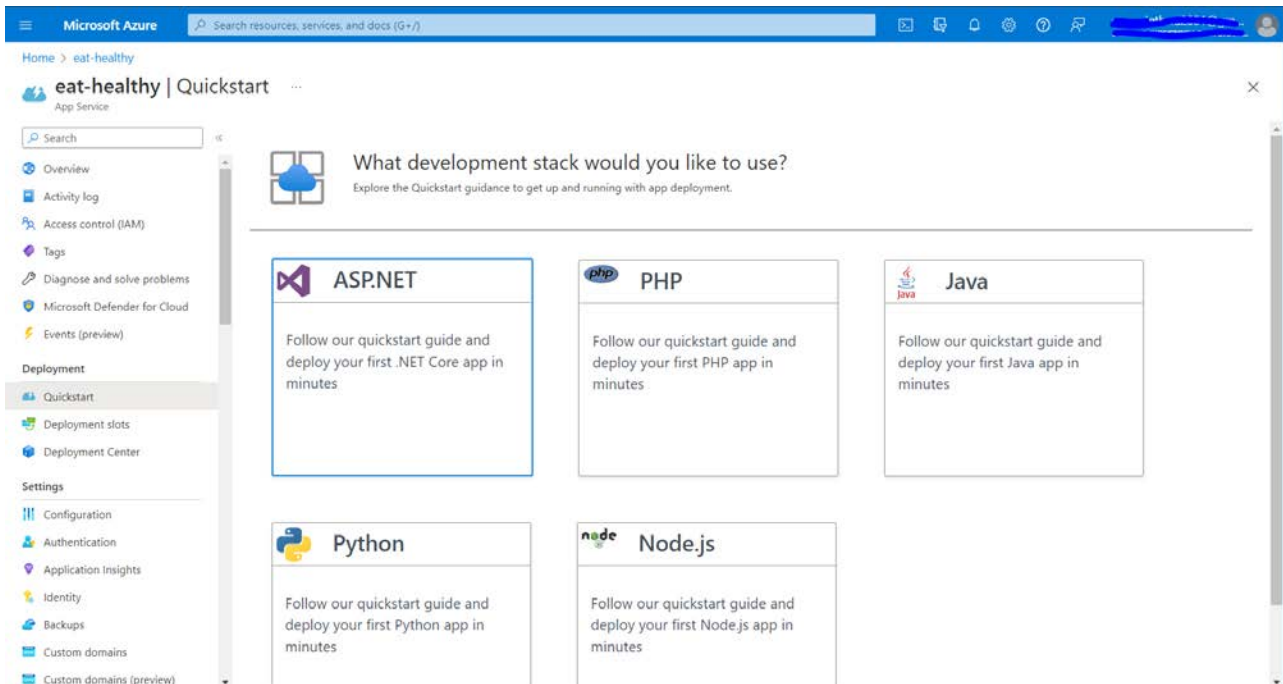
See all

Navigate

Subscriptions Resource groups All resources Dashboard

Tools

Click on **Quickstart** in **Deployment** to select the deployment method of your choice



Challenges Faced:

- First challenge i face was the design and framework for the web app.
- During the implementation of backend of recipe page faced many issue of using API and calling objects.
- Integrating SQL Database.
- Creating bot service
- Deploying web-app
- Github build failure issues
- Automated Testing
- Security constraints

Business Benefits:

Implementation of azure service able to boost deployment speed, meet the requirements and cut the operating cost to great extent. Integrating database with the azure service makes application more flexible and faster to communicate with database. Handling and maintaining bot is easier and

Working App is accessible on Github through my public repo; all you need to do is add the proper connection string settings (please see below for details).

<https://github.com/mayyyur/eat-healthy>

Please take a look at the video I made showing the web application in use.

<https://drive.google.com/file/d/1sOSFW4r7OVWYeTBz84RL8jWk4M5lvnx7/view>

Check out the running web application in the picture below.

Browser tabs: Eat Healthy, eat-healthy.scm.azurewebsites.net, eat-healthy - Microsoft Azure

URL: https://eat-healthy.azurewebsites.net/eat-healthy/

Navigation: Home, Protection, Food, Symptoms, Bot, Contact

Eat Healthy

Eating A Healthy Diet Is Very Important During The COVID-19 Pandemic. What We Eat And Drink Can Affect Our Body's Ability To Prevent, Fight And Recover From Infections.

Browser tabs: Protect And Awareness, eat-healthy.scm.azurewebsites.net, eat-healthy - Microsoft Azure

URL: https://eat-healthy.azurewebsites.net/eat-healthy/protect.html

Protect Yourself By Cooking Healthy food At Home

Make Healthy Food

Salad

 <p>Steak & Chips Salad View Recipe</p> <p>Calories: 2922.30 Diet Label: High-Fiber</p>	 <p>Zuni-Inspired Grilled Chicken Salad View Recipe</p> <p>Calories: 1082.21</p>	 <p>Shrimp Salad View Recipe</p> <p>Calories: 803.65 Diet Label: High-Fiber</p>
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Back

Ask Your Question !!

- 1. Tips For Healthy Eating
- 2. How Does Poor Nutrition Affect Us?
- 3. What Causes Poor Nutrition?
- 4. In what way is fibre healthy?
- 5. How important are fruit and veg?
- 6. How can a healthy diet affect cholesterol?
- 7. Are foods that contain sugar unhealthy?
- 8. Are carbs unhealthy?
- 9. What is the relationship between eating healthily and calories?
- 10. How can you achieve a healthy diet?
- 11. What is a healthy diet?
- 12. How can you benefit from a healthy diet?

Just now

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