

AI, Cloud & Modern Workplace Conference 2025

20, 21 & 22 February 2025 , Online Conference



Pieter de Bruin

Microsoft Learn Program Manager at Microsoft

**Microsoft Learn: what it is, what we are doing with
AI, and what is in it for you**

Thursday 20 February 2025 , 21:00 – 22:00 (GMT+2)



Takeaways

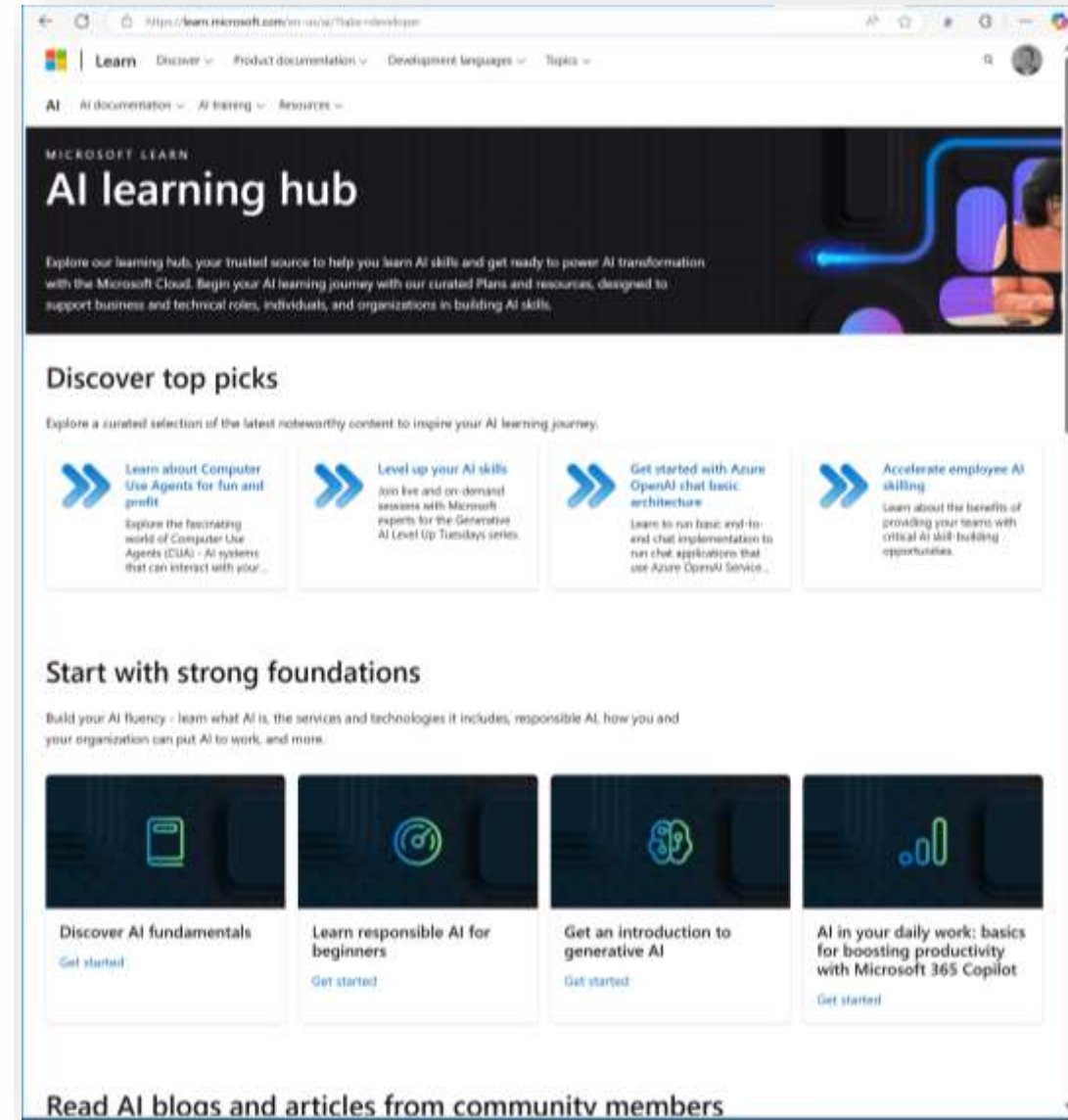
Technology evolves all the time

Learn about artificial intelligence

learn.microsoft.com/ai

Read, try, experiment

Share your feedback and expertise



Microsoft Learn. Spark possibility.

Documentation

Training

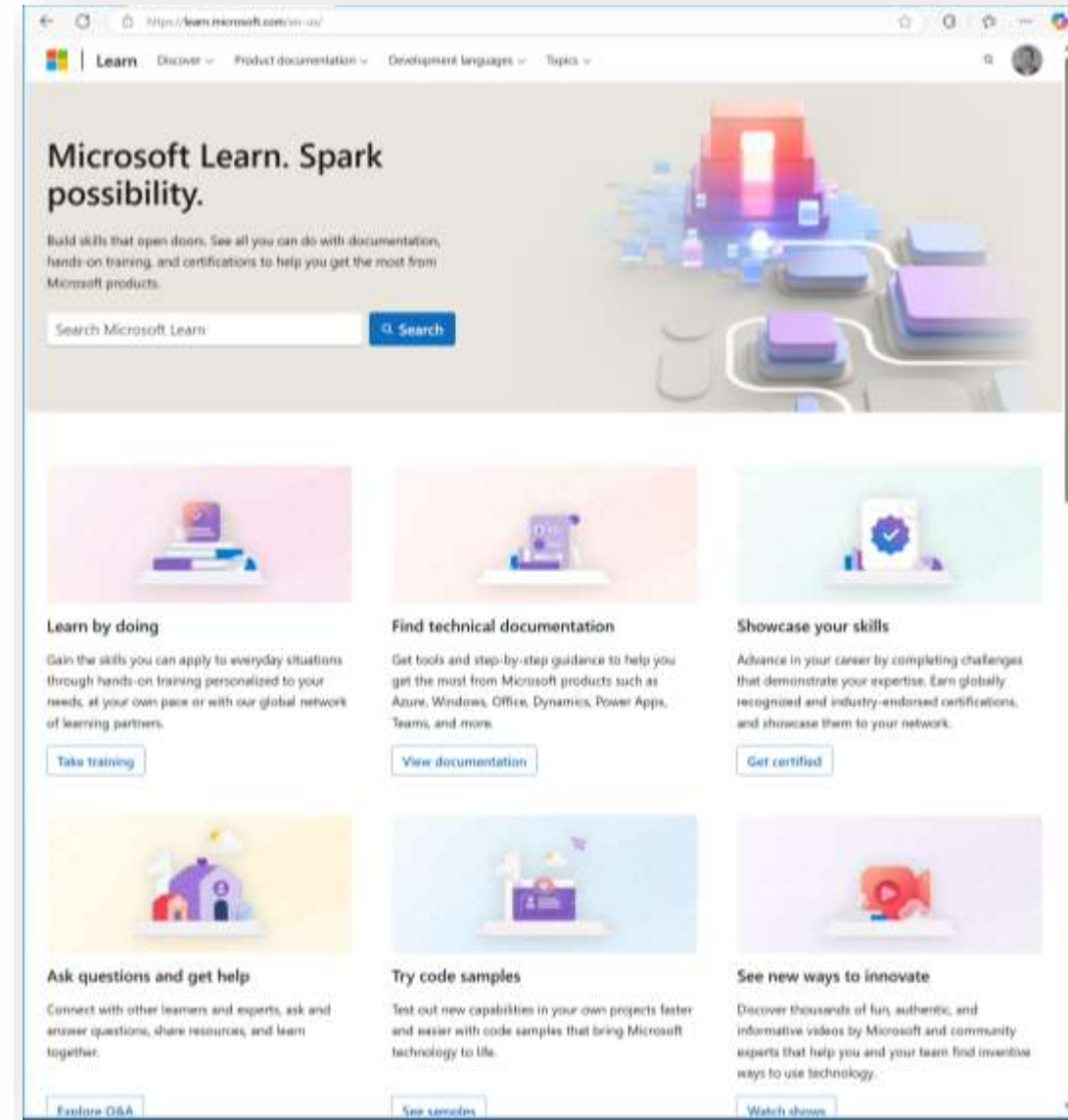
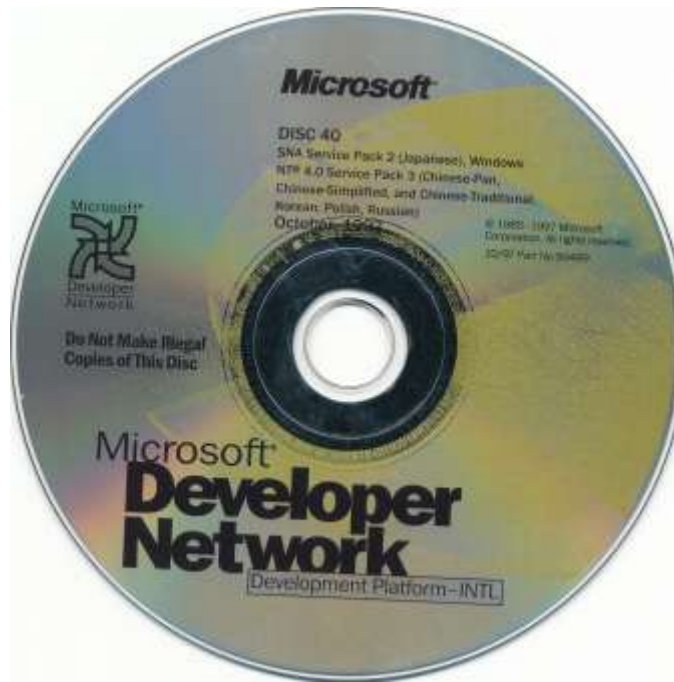
Credentials

Q&A

Code Samples

Assessments

Shows



Microsoft Learn today is

- Content

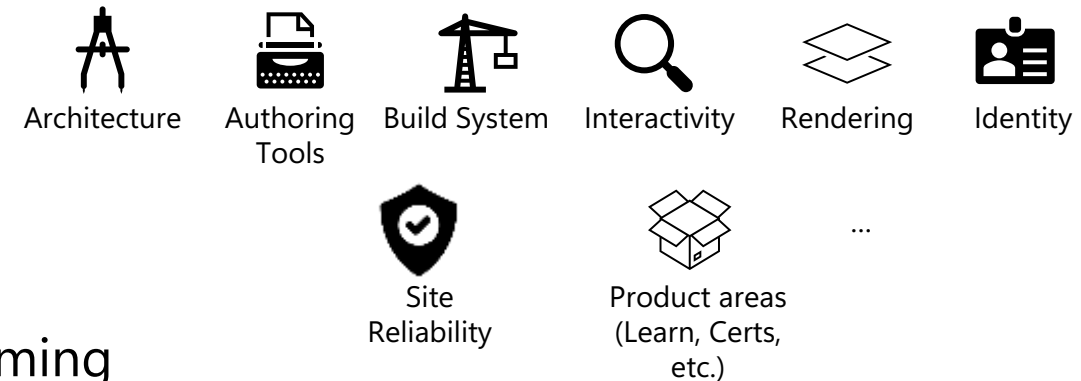
- Documentation articles
- Training modules
- Shows videos
- etc

- Product/Platform

- Millions of pages & visitors
- Working on teaching, adapting, connecting, transforming
- Integrating services & content

- People

- Content developers
- Engineers
- Program managers



Learn details

The image features a solid blue background. A thick, wavy orange line starts from the bottom left and curves upwards towards the right. A thinner, wavy pink line follows a similar path, positioned slightly above the orange line. In the bottom right corner, there is a soft gradient transitioning from a light blue to a purple hue.

Documentation

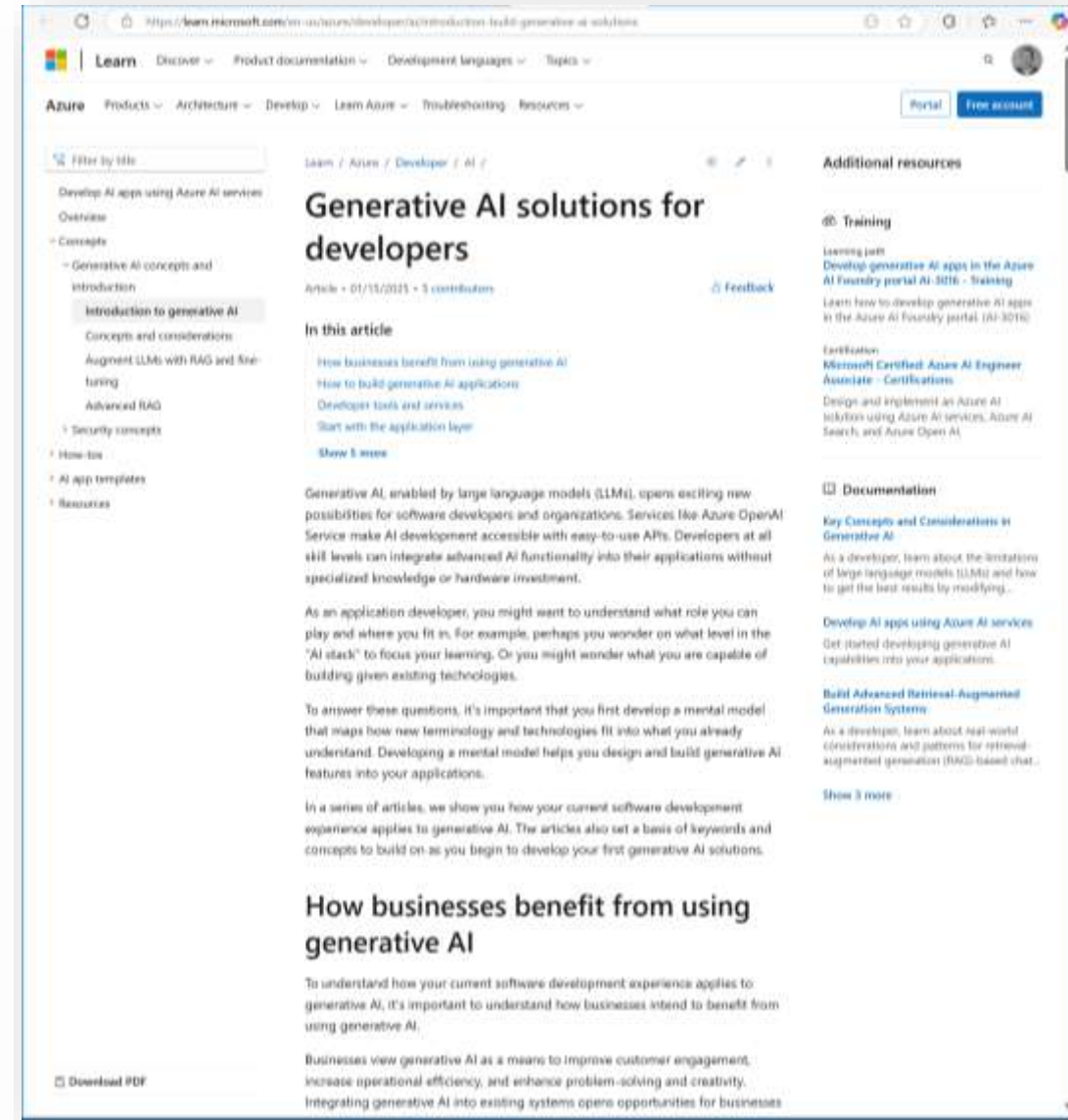
Products and services

- Conceptual, quickstart, how-to,
- Reference
- Topics

Audiences

- Programming languages

Multi language



The screenshot shows the Microsoft Learn website for the article "Generative AI solutions for developers". The page is structured with a left-hand navigation pane, a main content area, and a right-hand sidebar with additional resources.

Left-hand navigation pane:

- Filter by title
- Develop AI apps using Azure AI services
- Overview
- Concepts
 - Generative AI concepts and introduction
 - Introduction to generative AI**
 - Concepts and considerations
 - Augment LLMs with RAG and fine-tuning
 - Advanced RAG
- Security concepts
- How-to
- AI app templates
- Resources

Main content area:

Generative AI solutions for developers

Article • 01/15/2023 • 3 contributors [Feedback](#)

In this article

- [How businesses benefit from using generative AI](#)
- [How to build generative AI applications](#)
- [Developer tools and services](#)
- [Start with the application layer](#)

[Show 5 more](#)

Generative AI, enabled by large language models (LLMs), opens exciting new possibilities for software developers and organizations. Services like Azure OpenAI Service make AI development accessible with easy-to-use APIs. Developers at all skill levels can integrate advanced AI functionality into their applications without specialized knowledge or hardware investment.

As an application developer, you might want to understand what role you can play and where you fit in. For example, perhaps you wonder on what level in the "AI stack" to focus your learning. Or you might wonder what you are capable of building given existing technologies.

To answer these questions, it's important that you first develop a mental model that maps how new terminology and technologies fit into what you already understand. Developing a mental model helps you design and build generative AI features into your applications.

In a series of articles, we show you how your current software development experience applies to generative AI. The articles also set a basis of keywords and concepts to build on as you begin to develop your first generative AI solutions.

How businesses benefit from using generative AI

To understand how your current software development experience applies to generative AI, it's important to understand how businesses intend to benefit from using generative AI.

Businesses view generative AI as a means to improve customer engagement, increase operational efficiency, and enhance problem-solving and creativity. Integrating generative AI into existing systems opens opportunities for businesses

[Download PDF](#)

Right-hand sidebar:

Additional resources

Training

[Learning path](#)
Develop generative AI apps in the Azure AI Foundry portal AI-3016 - Training

[Learn how to develop generative AI apps in the Azure AI Foundry portal \(AI-3016\)](#)

Certification
[Microsoft Certified: Azure AI Engineer Associate - Certification](#)

Design and implement an Azure AI solution using Azure AI services, Azure AI Search, and Azure Open AI.

Documentation

[Key Concepts and Considerations in Generative AI](#)

As a developer, learn about the limitations of large language models (LLMs) and how to get the best results by modifying...

[Develop AI apps using Azure AI services](#)

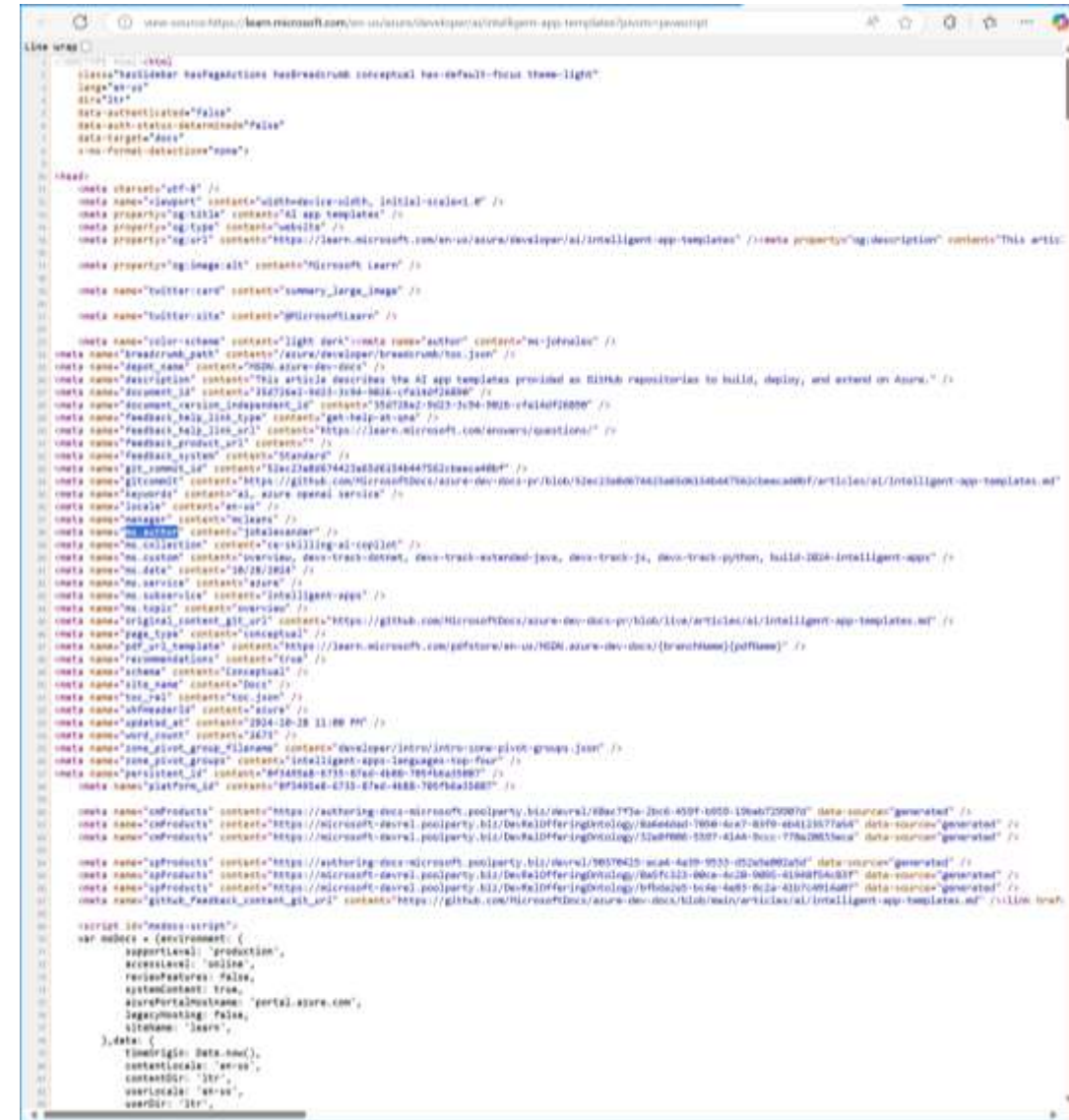
Get started developing generative AI capabilities into your applications.

[Build Advanced Retrieval-Augmented Generation Systems](#)

As a developer, learn about real-world considerations and patterns for retrieval-augmented generation (RAG)-based chat...

[Show 3 more](#)

Markdown with YAML metadata



Training

Modules

Knowledge checks

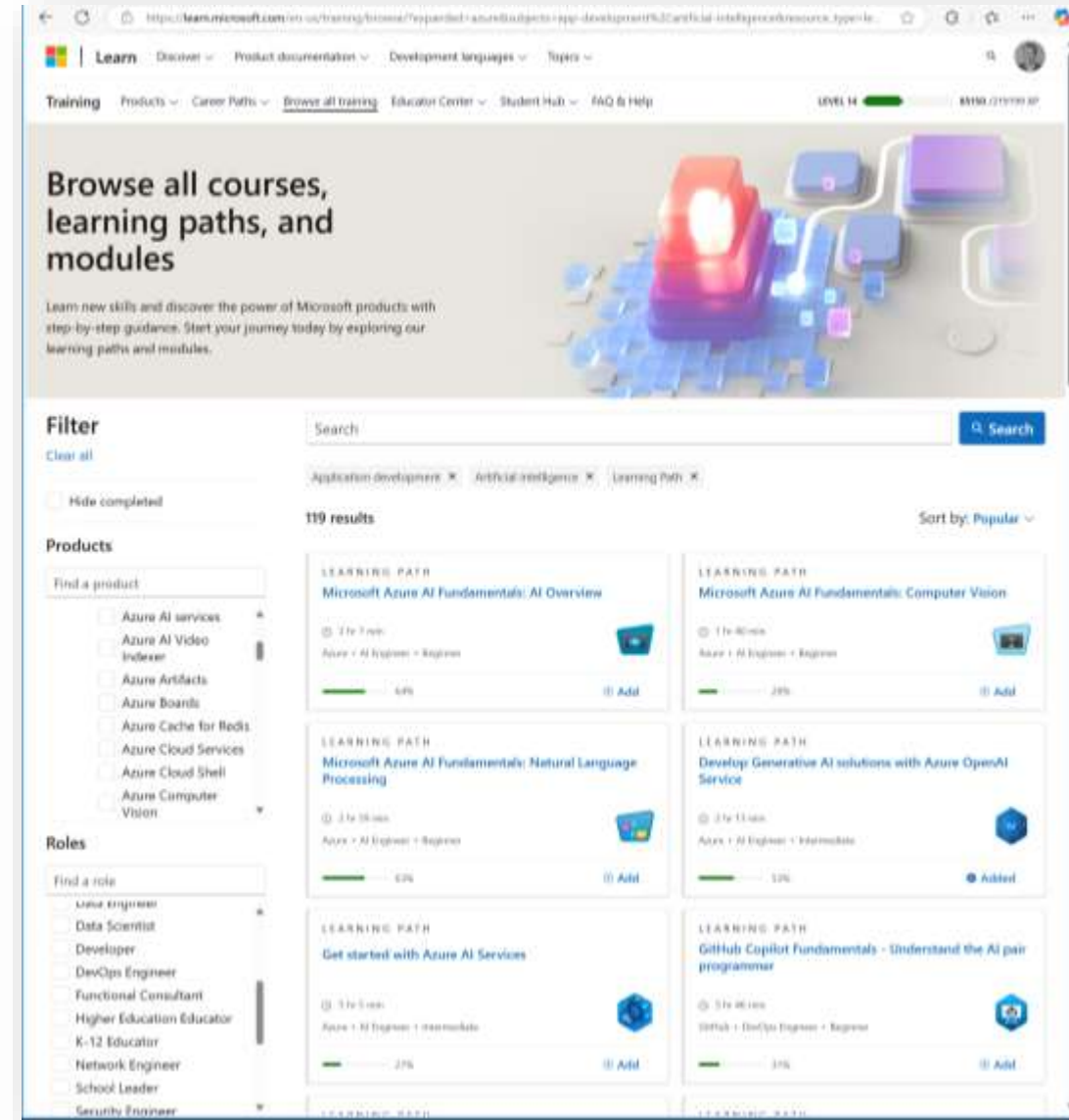
Sandboxes

Learning paths

Collections

Challenges

Plans



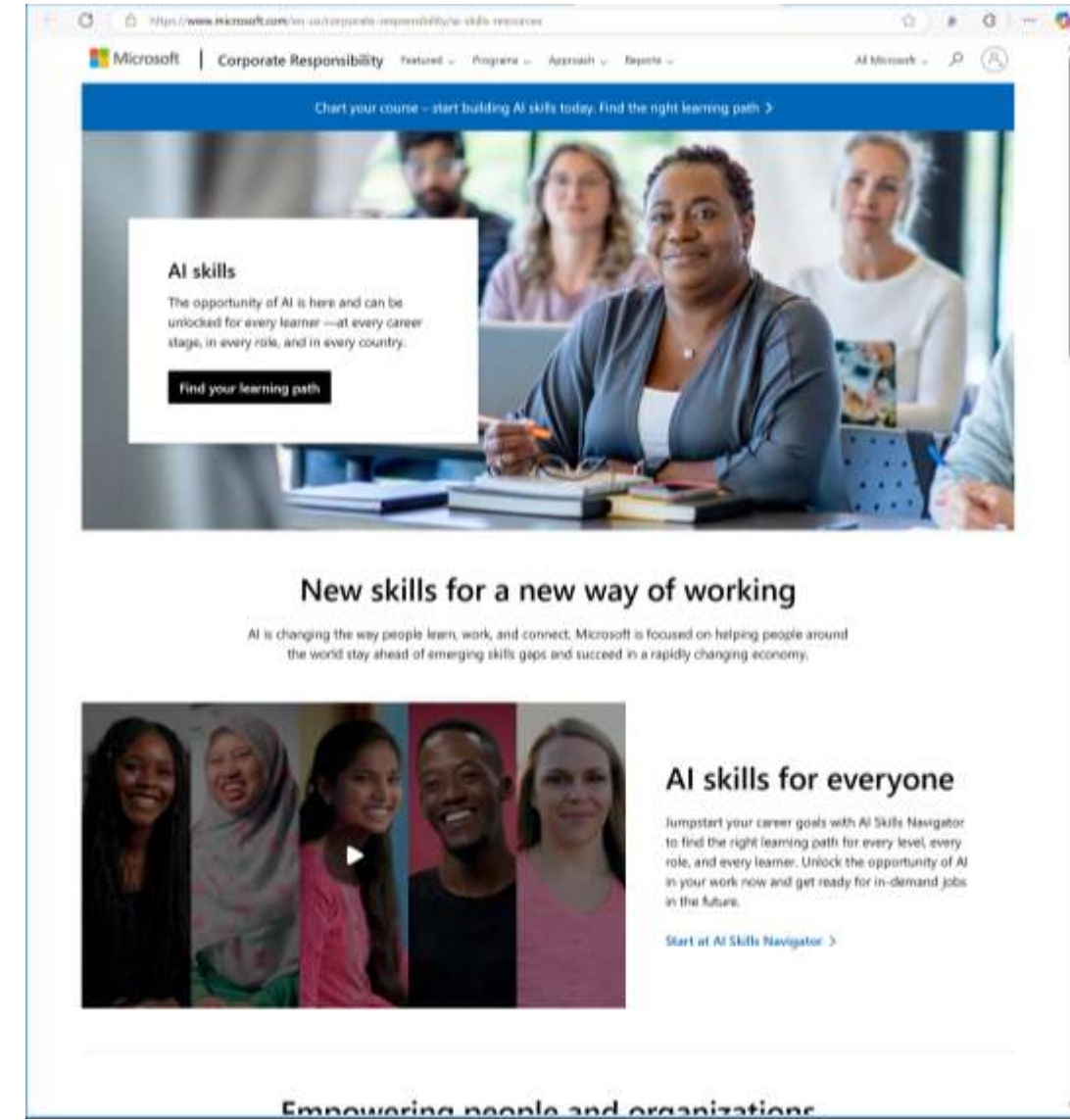
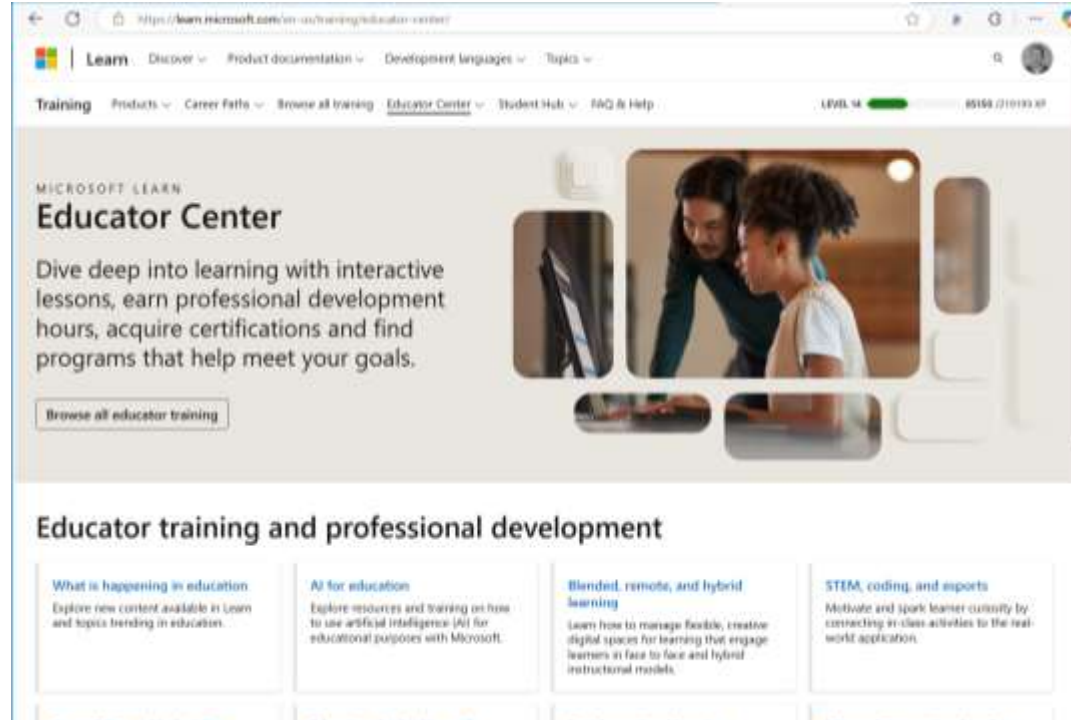
Training catalog to audiences

Educator Center

Student Hub

Philanthropies

AI Skills Navigator 23M->100M learners



Q&A

Learn Microsoft Q&A

Azure AI services

3,127 questions

A group of Azure services, SDKs, and APIs designed to make apps more intelligent, engaging, and discoverable.

[Browse all Azure tags](#) [Follow](#)

Filter

3,127 questions with Azure AI services tags

Sort by: Updated

Content

- All questions (3,127)
- No answers (300)
- Has answers (2,827)
- No answers or comments (1)
- With accepted answer (304)
- My content (0)
- Questions I follow (0)

2 answers

I get an error in TimeGen deployment: The model execution took longer than the timeout supplied by request_timeout_ms under request_settings of your deployment config.

The error started appearing one week ago even though I haven't changed anything to my deployment.

Azure AI services

1 answer

How to handle the Human in the loop for concurrent agents and topic-subscription based scenarios

Dear Community, I'm currently working on incorporating a Human-in-the-Loop (HIL) approach using AutoGen and facing some challenges. Here are a few scenarios where I need guidance: Can I effectively implement HIL in my Agentic solution?

Azure OpenAI Service Azure AI services

1 answer

Cannot access to Agents in Azure AI Foundry

Hello there, every time I try to access the Agents I get the following error:

Azure AI services

9 answers

Issue Querying Elasticsearch Logs with Azure OpenAI

Hello, I am using the Elasticsearch (Preview) module in OpenAI with the "Bring Your Own Data" service. I have connected my Azure OpenAI instance to my Elasticsearch index, and I would like to query the log content of my...

Azure AI Search Azure OpenAI Service Azure AI services

Learn Microsoft Q&A

How to handle the Human in the loop for concurrent agents and topic-subscription based scenarios

ASHLIN GABRIEL RAJAN • Follow

Feb 17, 2025

Dear Community,

I'm currently working on incorporating a Human-in-the-Loop (HIL) approach using AutoGen and facing some challenges. Here are a few scenarios where I need guidance:

- How can I effectively implement HIL in my Agentic solution built with the AutoGen framework and its core SDK (Topics-Subscription, concurrent-agents)?
- I'm using the core SDK and would like to understand how APIs should be designed, especially for handling asynchronous cases involving HIL.

Any insights, examples, sample snippets, or best practices would be greatly appreciated!

Thanks in advance!

<https://microsoft.github.io/autogen/stable/user-guide/core-user-guide/design-patterns/concurrent-agents.html>

<https://microsoft.github.io/autogen/stable/user-guide/core-user-guide/cookbook/topic-subscription-scenarios.html>

Learn Microsoft Q&A

Accepted answer

Sina Salam • Follow

Feb 17, 2025, 5:10 PM

Hello ASHLIN GABRIEL RAJAN,

Welcome to the Microsoft Q&A and thank you for posting your questions here.

I understand that you would like to know how you can handle the Human in the loop for concurrent agents and topic-subscription based scenarios.

To effectively integrate Human in the Loop (HIL) in concurrent and topic subscription based AutoGen solutions, consider the following approach:

- Work on your design or architecture by:
 - Implement a dedicated queue or decision manager that routes requests to humans asynchronously.
 - Instead of a simple event bus, consider Azure Service Bus, RabbitMQ, or Kafka for better handling of concurrent agent communication. - <https://learn.microsoft.com/en-us/azure/service-bus-messaging/service-bus-messaging-overview>
 - Use state management solutions (Redis, CosmosDB) to track pending requests and avoid conflicts.
- Let your APIs follow a callback based model to handle human intervention efficiently. For an example API flow for Asynchronous Human Review:
 - Agent publishes a task needing human validation to a queue and human receives a notification (via Teams, Email, Slack, or a UI).
 - If human doesn't respond within X minutes, agent takes a default action.
 - Agents receive the response and proceed with execution. This is a REST API code snippet example with Webhooks for HIL.

```
Python
from flask import Flask, request, jsonify
from threading import Thread
import time

app = Flask(__name__)
# Simulated Decision Storage (Can be replaced with Redis or a DB)
pending_decisions = {}

@app.route('/request_decision', methods=['POST'])
def request_decision():
    data = request.json
    task_id = data['task_id']

    # Store pending decision (Simulate async request to human)
    pending_decisions[task_id] = "Pending"
    print(f"Human review needed for task {task_id}")
    return jsonify({"message": "Decision request sent", "task_id": task_id})

@app.route('/submit_decision', methods=['POST'])
def submit_decision():
    data = request.json
    task_id = data['task_id']
    decision = data['decision']

    if task_id in pending_decisions:
        pending_decisions[task_id] = decision
        return jsonify({"message": "Decision received", "task_id": task_id})

    return jsonify({"error": "Task ID not found"}), 400

# Background process to check decision status
def monitor_decisions():
    while True:
        for task_id, decision in pending_decisions.items():
            # Logic to check if human response is received
            # ...
        time.sleep(10)
```

Question activity

[Follow question](#)

Additional resources

Training

Module: Enhance Microsoft Copilot Studio agents - Training

This module examines some of the methods that you can use to enhance your Microsoft Copilot Studio agents.

Documentation

Begin the agent topic design process - Microsoft Copilot Studio

You use agent topics in Microsoft Copilot Studio to provide answers and information for your customers or agent users...

Building agents with Agents SDK (preview)

Learn about agents and the Agents SDK

Transition conversations from bot to human - Bot Service

Learn how to design for situations where a user starts a conversation with a bot and then must be handed off to a human.

Choose the right agent solution to support your use case (preview)

Learn about different agent solutions, who they're for, and when to use them

Answers to Q&A

The screenshot shows the Microsoft Support Community homepage. At the top, there's a navigation bar with 'Microsoft | Community' and links to 'Products', 'Get Started', and 'Buy Microsoft 365'. The main header features a 'Welcome to the Microsoft Support Community' message, a search bar, and a link for new users. Below this, a section titled 'Didn't find an answer?' includes an 'Ask a new question' button and four statistics: 2.5 million average daily visitors, 6000 posts daily, 2 hour average response time, and 330 million customers helped annually. The 'Browse products' section displays a grid of product categories including Windows, Windows Server, Windows Client for IT Pros, Microsoft 365 and Office, Gaming and Xbox, Outlook, Skype, Surface, Microsoft Teams, Windows Insider Program, Microsoft 365 E5, Microsoft Edge, Word, and Microsoft 365 E3.

Microsoft | Community Products Get Started Buy Microsoft 365 All Microsoft

Welcome to the Microsoft Support Community

Get answers from our community of experts.

New to the Community? [Learn more](#)

Didn't find an answer?

[Ask a new question](#)

- 2.5 million average daily visitors
- 6000 posts daily
- 2 hour average response time
- 330 million customers helped annually

Browse products

- Windows
- Windows Server
- Windows Client for IT Pros
- Microsoft 365 and Office
- Gaming and Xbox
- Outlook
- Skype
- Surface
- Microsoft Teams
- Windows Insider Program
- Microsoft 365 E5
- Microsoft Edge
- Word
- Microsoft 365 E3

The screenshot shows the Microsoft Learn Q&A homepage. The navigation bar includes 'Learn | Discover', 'Product documentation', 'Development languages', and 'Topics'. The main header asks 'What do you need help with today?' and provides a brief introduction to the Q&A section. Below this, a 'Supported products' section displays a grid of 16 product categories, each with a Microsoft logo and a brief description. The products listed are: .NET, Azure, HoloLens, Microsoft 365, Microsoft Advertising, Microsoft Graph, Microsoft Intune, Microsoft Partner Center, Microsoft BizTalk Server, Microsoft System Center, Microsoft Teams, Microsoft Viva, Power BI, SQL Server, Exchange, and Visual Studio.

Learn | Discover Product documentation Development languages Topics

Q&A Questions Tags Help

[Ask a question](#)

WELCOME TO MICROSOFT Q&A

What do you need help with today?

Find it on Q&A — the home for technical questions and answers at Microsoft. New to Q&A? See our [get started](#) article below.

Supported products

- .NET**
Microsoft Technologies based on the .NET software framework.
- Azure**
A cloud computing platform and infrastructure for building, deploying and managing applications and services through a worldwide network of...
- HoloLens**
A family of Microsoft self-contained, holographic devices that enable engagement with digital content and interaction with holograms in the...
- Microsoft 365**
Formerly Office 365, is a line of subscription services offered by Microsoft which adds to and evolves the Microsoft Office product line.
- Microsoft Advertising**
A Microsoft business unit that sets business and product strategy for online advertiser and publisher customers.
- Microsoft Graph**
A Microsoft programmability model that exposes REST APIs and client libraries to access data in Microsoft 365 services.
- Microsoft Intune**
A Microsoft cloud-based management solution that offers mobile device management, mobile application management, and PC management.
- Microsoft Partner Center**
A Microsoft website for partners that provides access to product support, a partner community, and other partner services.
- Microsoft BizTalk Server**
A family of Microsoft server products that support large-scale implementation management of enterprise application integration processes.
- Microsoft System Center**
A suite of Microsoft systems management products that offer solutions for managing datacenter resources, private clouds, and client...
- Microsoft Teams**
A Microsoft customizable chat-based workspace.
- Microsoft Viva**
A Microsoft employee experience platform built on Microsoft 365 that brings together communications, knowledge, learning, resources, and...
- Power BI**
- SQL Server**
- Exchange**
- Visual Studio**



Learn & artificial intelligence

Start with quality attributes

Security

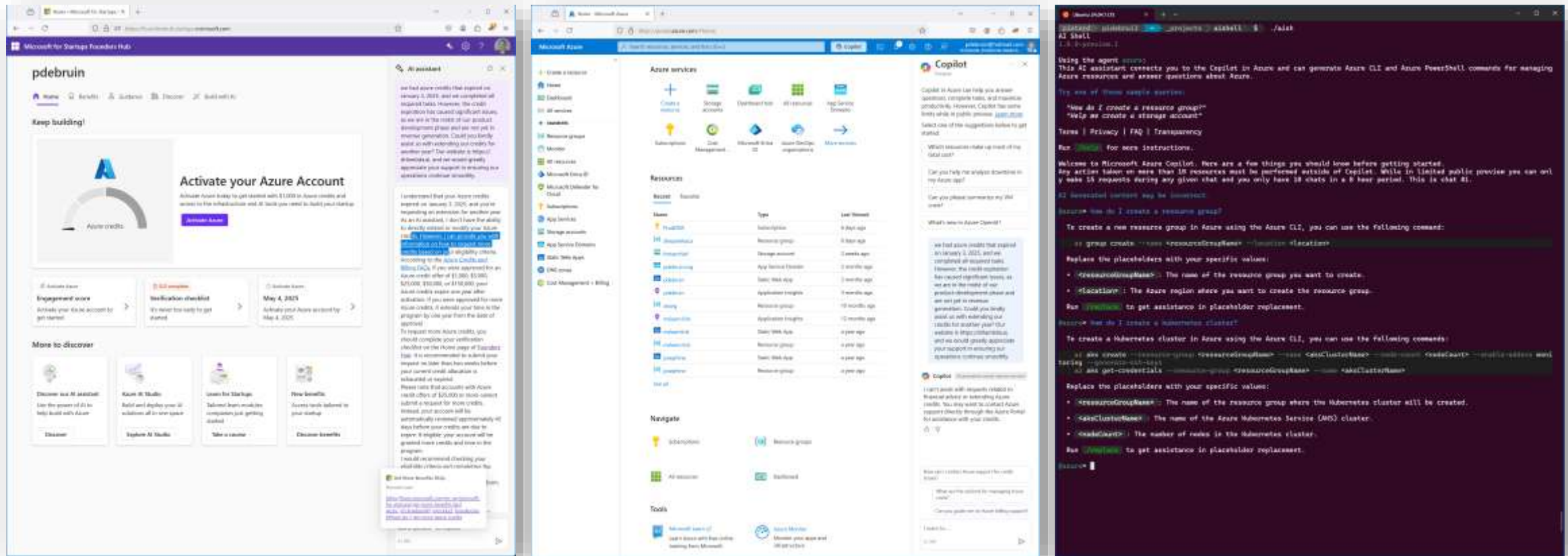
Reliability

Responsible AI

Sustainability



AI with documentation

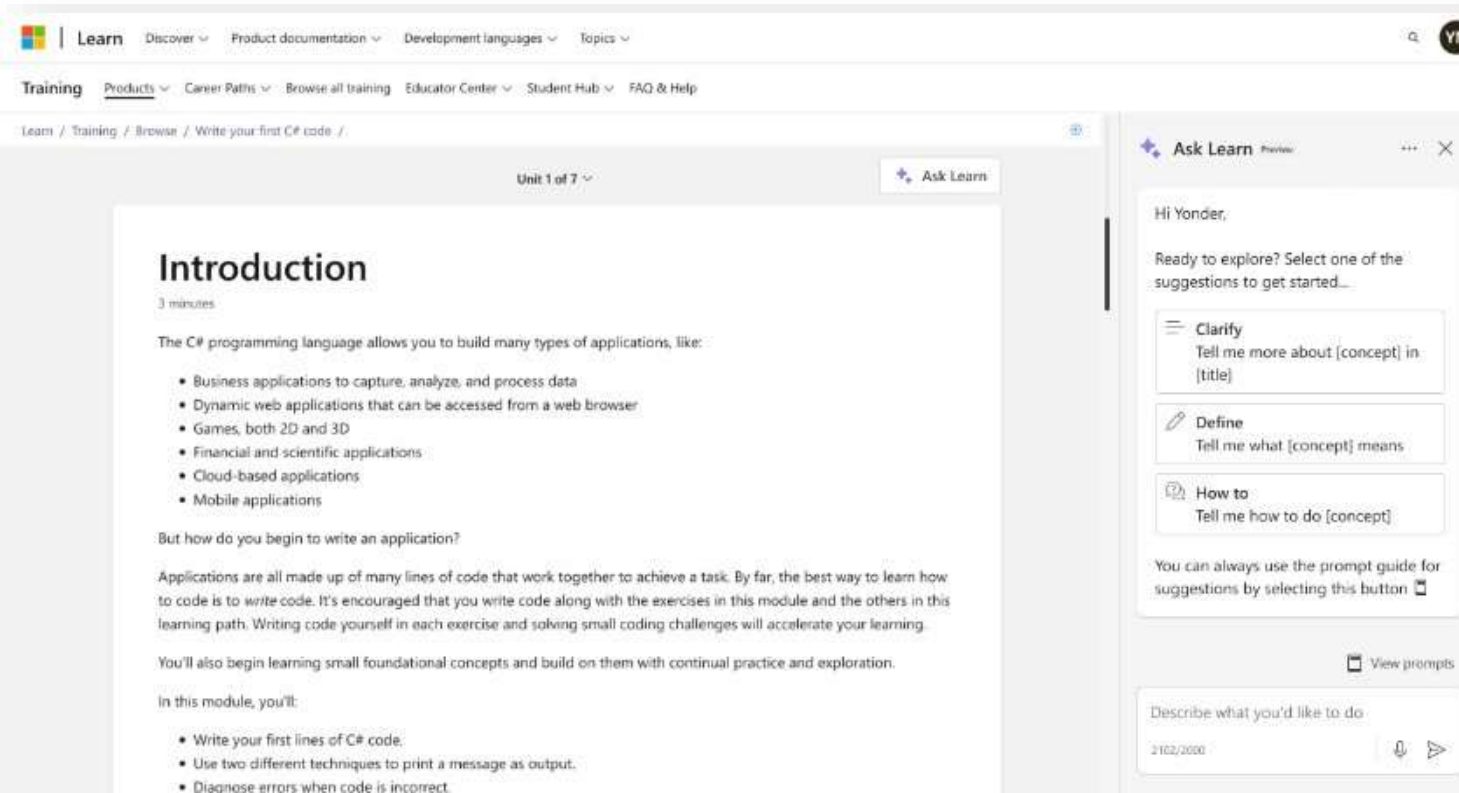


<https://devblogs.microsoft.com/engineering-at-microsoft/how-we-built-ask-learn-the-rag-based-knowledge-service/>

AI with training

Personalized learning plan

Ask Learn assistant



The screenshot shows the Microsoft Learn interface for the 'Write your first C# code' module. The main content area displays the 'Introduction' section, which includes a list of application types (business, dynamic web, games, financial/scientific, cloud-based, mobile) and a prompt guide for writing code. On the right, the 'Ask Learn' assistant is active, showing a chat window with a greeting and suggestions to clarify, define, or learn how to do something. A text input field at the bottom of the chat contains the prompt 'Describe what you'd like to do'.

Introduction

3 minutes

The C# programming language allows you to build many types of applications, like:

- Business applications to capture, analyze, and process data
- Dynamic web applications that can be accessed from a web browser
- Games, both 2D and 3D
- Financial and scientific applications
- Cloud-based applications
- Mobile applications

But how do you begin to write an application?

Applications are all made up of many lines of code that work together to achieve a task. By far, the best way to learn how to code is to *write* code. It's encouraged that you write code along with the exercises in this module and the others in this learning path. Writing code yourself in each exercise and solving small coding challenges will accelerate your learning.

You'll also begin learning small foundational concepts and build on them with continual practice and exploration.

In this module, you'll:

- Write your first lines of C# code.
- Use two different techniques to print a message as output.
- Diagnose errors when code is incorrect.

Ask Learn

Hi Yonder,

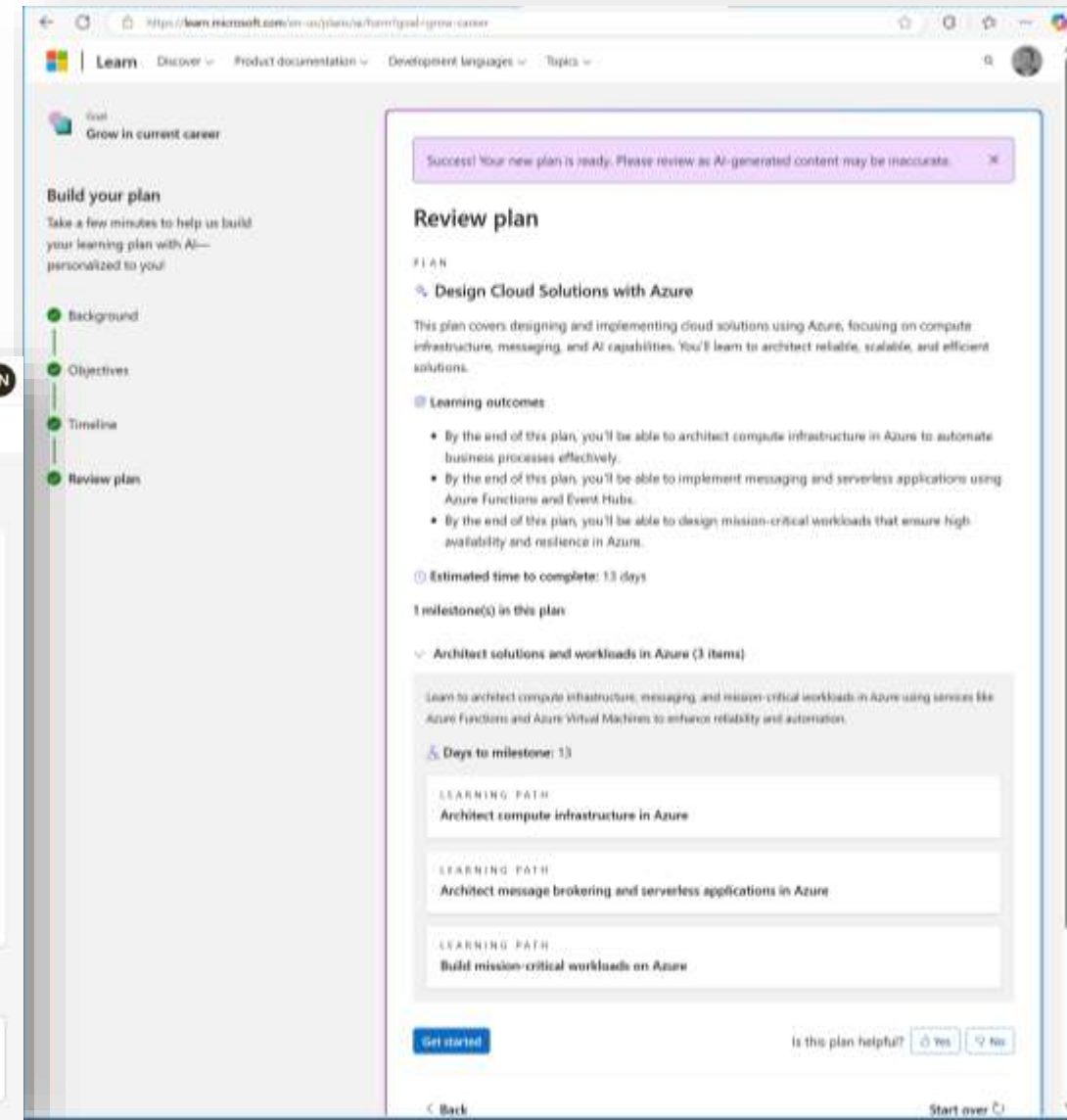
Ready to explore? Select one of the suggestions to get started...

- Clarify
Tell me more about [concept] in [title]
- Define
Tell me what [concept] means
- How to
Tell me how to do [concept]

You can always use the prompt guide for suggestions by selecting this button

Describe what you'd like to do

2/10/2020



The screenshot shows a personalized learning plan for 'Design Cloud Solutions with Azure'. It includes a success message, a plan overview, learning outcomes, estimated completion time, milestones, and a list of learning paths. The plan is titled 'Design Cloud Solutions with Azure' and covers designing and implementing cloud solutions using Azure. The learning outcomes include architecting compute infrastructure, implementing messaging and serverless applications, and designing mission-critical workloads. The estimated time to complete is 13 days. The milestones include 'Architect solutions and workloads in Azure'. The learning paths listed are 'Architect compute infrastructure in Azure', 'Architect message brokering and serverless applications in Azure', and 'Build mission-critical workloads on Azure'.

Success! Your new plan is ready. Please review as AI-generated content may be inaccurate.

Review plan

PLAN

Design Cloud Solutions with Azure

This plan covers designing and implementing cloud solutions using Azure, focusing on compute infrastructure, messaging, and AI capabilities. You'll learn to architect reliable, scalable, and efficient solutions.

Learning outcomes

- By the end of this plan, you'll be able to architect compute infrastructure in Azure to automate business processes effectively.
- By the end of this plan, you'll be able to implement messaging and serverless applications using Azure Functions and Event Hubs.
- By the end of this plan, you'll be able to design mission-critical workloads that ensure high availability and resilience in Azure.

Estimated time to complete: 13 days

1 milestone(s) in this plan

Architect solutions and workloads in Azure (3 items)

Learn to architect compute infrastructure, messaging, and mission-critical workloads in Azure using services like Azure Functions and Azure Virtual Machines to enhance reliability and automation.

Days to milestone: 13

LEARNING PATH

Architect compute infrastructure in Azure

LEARNING PATH

Architect message brokering and serverless applications in Azure

LEARNING PATH

Build mission-critical workloads on Azure

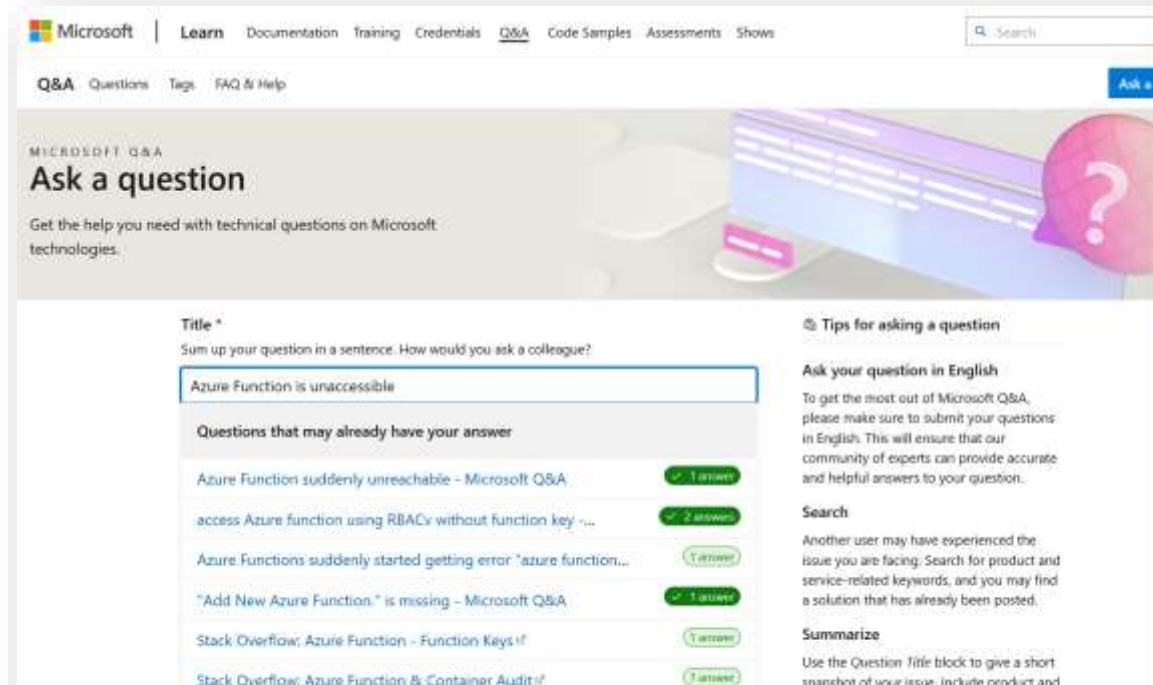
Get started

Is this plan helpful? Yes No

Back Start over

AI with Q&A

- Find similar questions
- Answer my question
- Get question feedback
- Rewrite for me



Microsoft | Learn Documentation Training Credentials Q&A Code Samples Assessments Shows

Q&A Questions Tags FAQ & Help

MICROSOFT Q&A
Ask a question
Get the help you need with technical questions on Microsoft technologies.

Title *
Sum up your question in a sentence. How would you ask a colleague?
Azure Function is inaccessible

Questions that may already have your answer

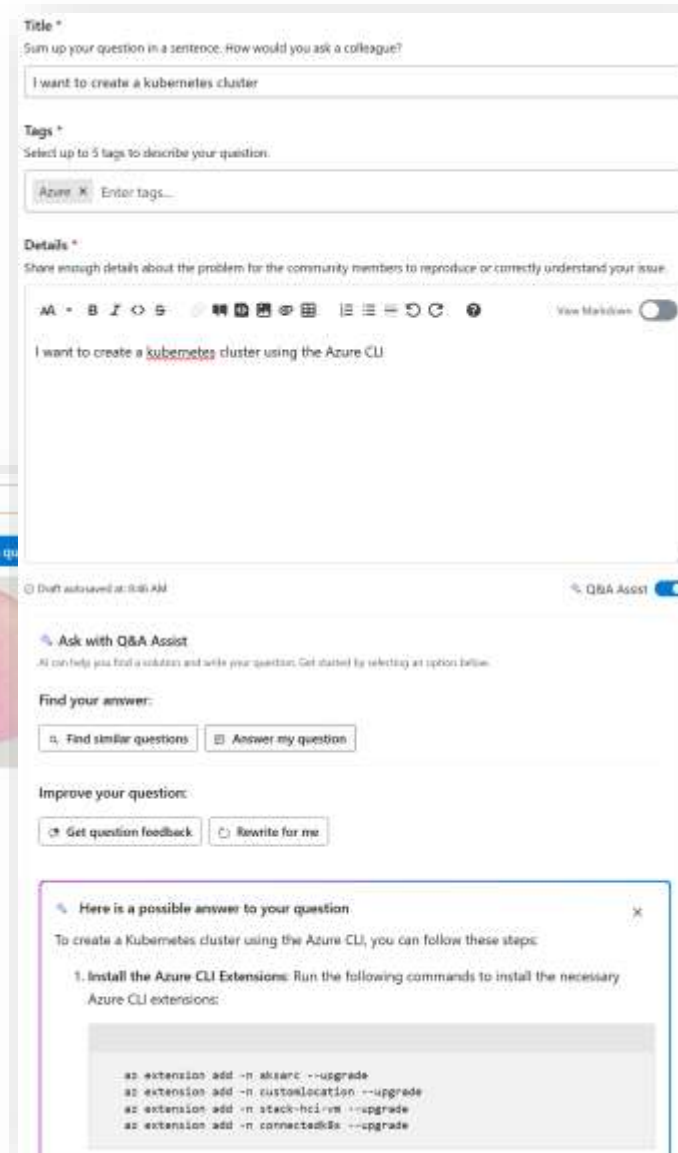
Question	Answers
Azure Function suddenly unreachable - Microsoft Q&A	1 answer
access Azure function using RBAC without function key - ...	2 answers
Azure Functions suddenly started getting error "azure function..."	1 answer
"Add New Azure Function." is missing - Microsoft Q&A	1 answer
Stack Overflow: Azure Function - Function Keys if	1 answer
Stack Overflow: Azure Function & Container Audit if	1 answer

Tips for asking a question

Ask your question in English
To get the most out of Microsoft Q&A, please make sure to submit your questions in English. This will ensure that our community of experts can provide accurate and helpful answers to your question.

Search
Another user may have experienced the issue you are facing. Search for product and service-related keywords, and you may find a solution that has already been posted.

Summarize
Use the Question title block to give a short snapshot of your issue. Include product and



Title *
Sum up your question in a sentence. How would you ask a colleague?
I want to create a kubernetes cluster

Tags *
Select up to 5 tags to describe your question.
Azure X Enter tags...

Details *
Share enough details about the problem for the community members to reproduce or correctly understand your issue.
I want to create a kubernetes cluster using the Azure CLI

Find your answer:
Find similar questions Answer my question

Improve your question:
Get question feedback Rewrite for me

Here is a possible answer to your question

To create a Kubernetes cluster using the Azure CLI, you can follow these steps:

1. **Install the Azure CLI Extensions:** Run the following commands to install the necessary Azure CLI extensions:

```
az extension add --n aks-arc --upgrade
az extension add --n customlocation --upgrade
az extension add --n stack-hci --upgrade
az extension add --n connectedk8s --upgrade
```

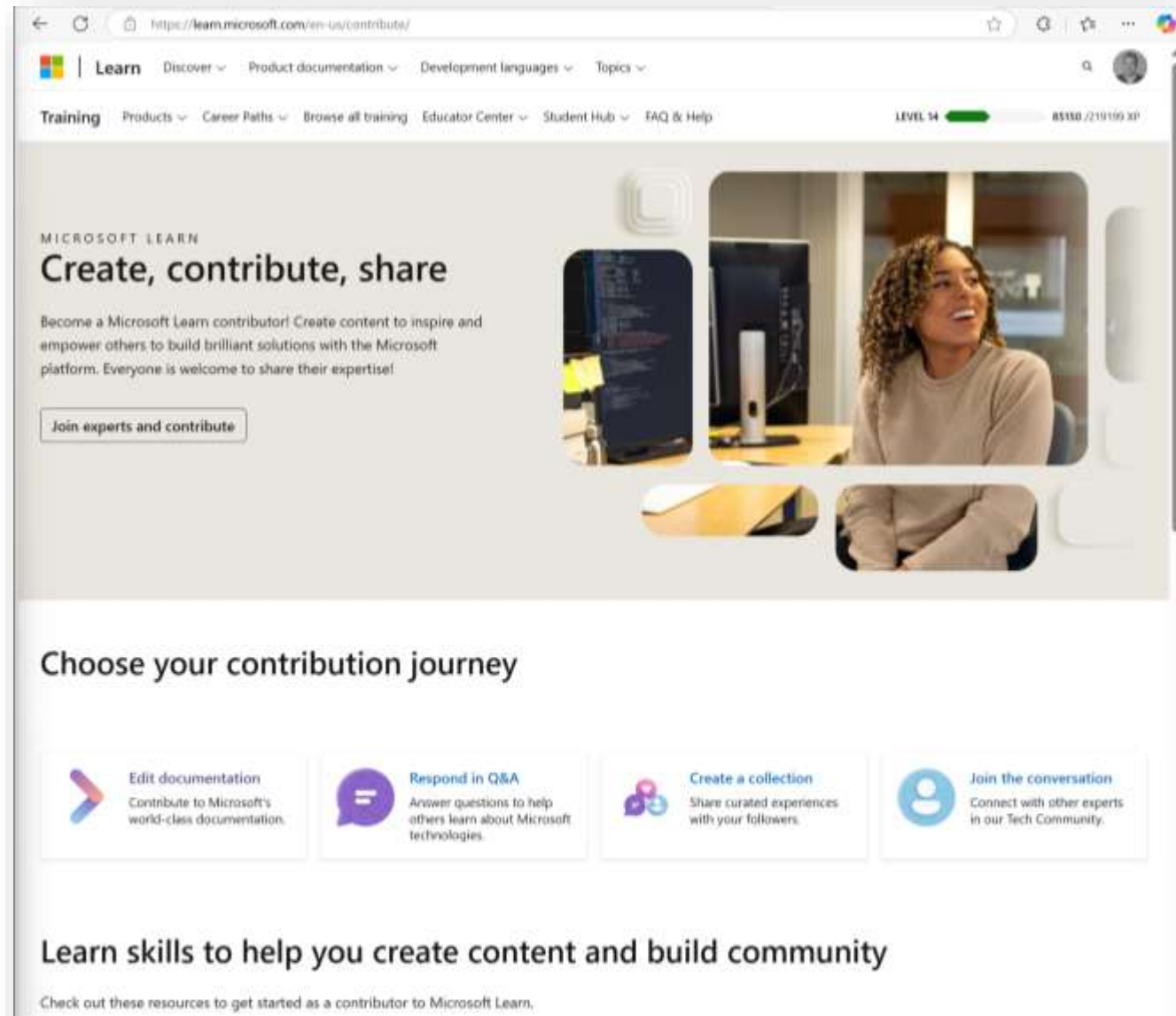


Learn: what's in it for you?

Contributor home

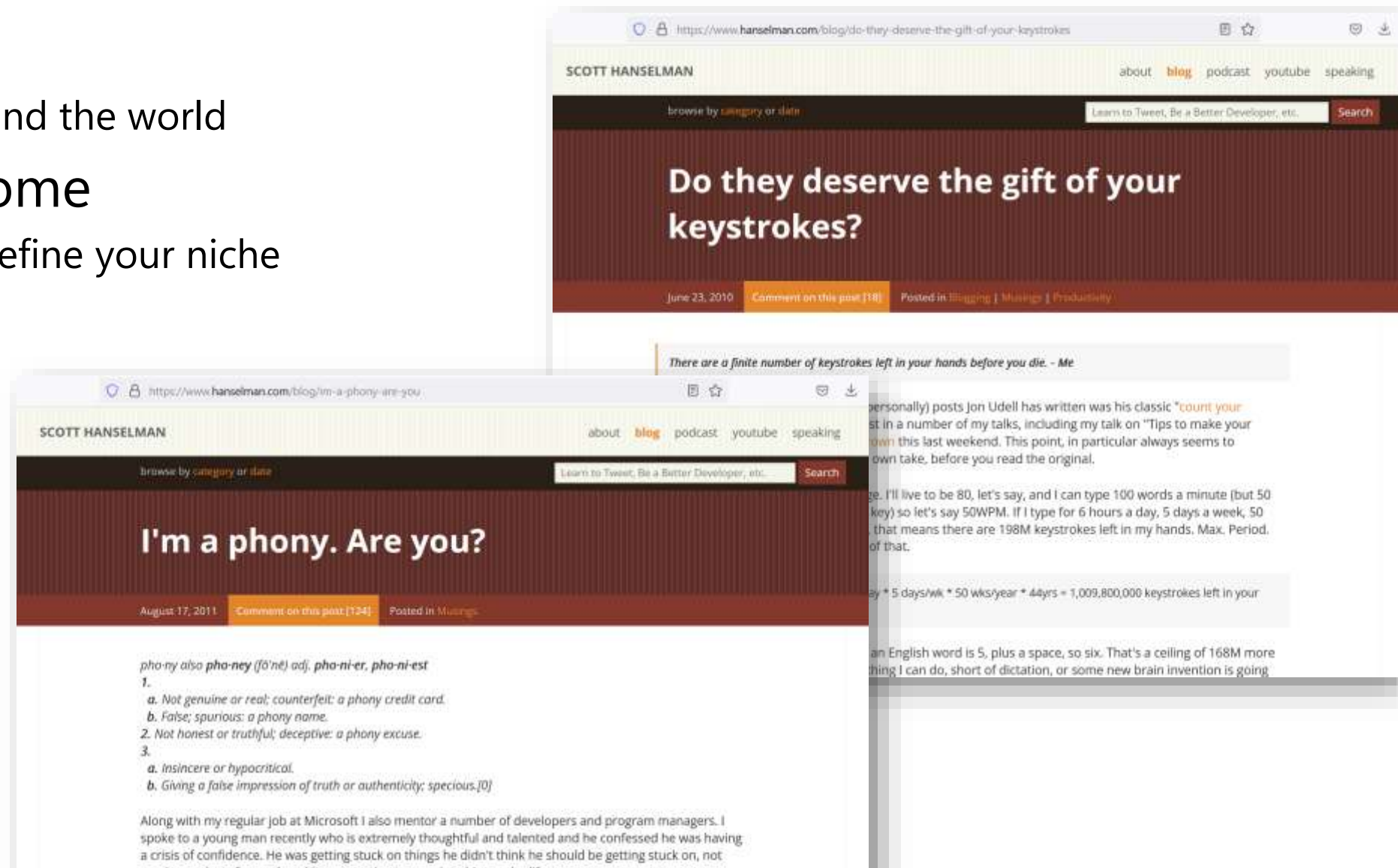
Public start page for anything on community, contributing and Learn.

[learn.microsoft.com/contribute](https://learn.microsoft.com/en-us/contribute)



Why not?

- Priorities
 - Tell your manager, and the world
- Imposter syndrome
 - You are an expert, define your niche



Documentation contributions

Visual Studio Docs

Tasks Languages Workload Product Resources

Table of Contents

Filter by titles

App Service Documentation

- Overview
 - About Visual Studio
 - About the code editor
 - About projects and solutions
 - App Service plans

Azure / App Service / IDE / Web Apps

Azure App Service plan overview

Article • 11/15/2021 • 7 minutes to read • 9 contributors

Feedback

How does my app run and scale?
How much does my App Service plan cost?
What if my app needs more capabilities or features?
Should I put an app in a new plan or an existing plan?
Manage an App Service Plan

When you create an App Service plan in a certain region (for example, West Europe), a set of compute resources is created for that plan in that region. Whatever apps you put into this App Service plan run on these compute resources as defined by your App Service plan. Each App Service plan defines:

Was this page helpful?

Yes No

What is the reason for your feedback?

☐ Content is easy to understand.

☐ I accomplished my task or solved my problem.

☐ Information was easy to find.

☐ I learned something new.

☐ Translation quality

☐ Other

Tell us more.

Share your experience with us, but please don't include sensitive or personal information.

Submit

Privacy policy

Provide product feedback | Get help at Microsoft Q&A

Was this page helpful?

Yes No

What is the reason for your feedback?

☐ Content is hard to understand.

☐ Procedure or code doesn't work.

☐ Couldn't find what I need.

☐ Out of date/obsolete.

☐ Translation quality

☐ Other

Tell us more.

Share your experience with us, but please don't include sensitive or personal information.

Submit

Privacy policy

Provide product feedback | Get help at Microsoft Q&A

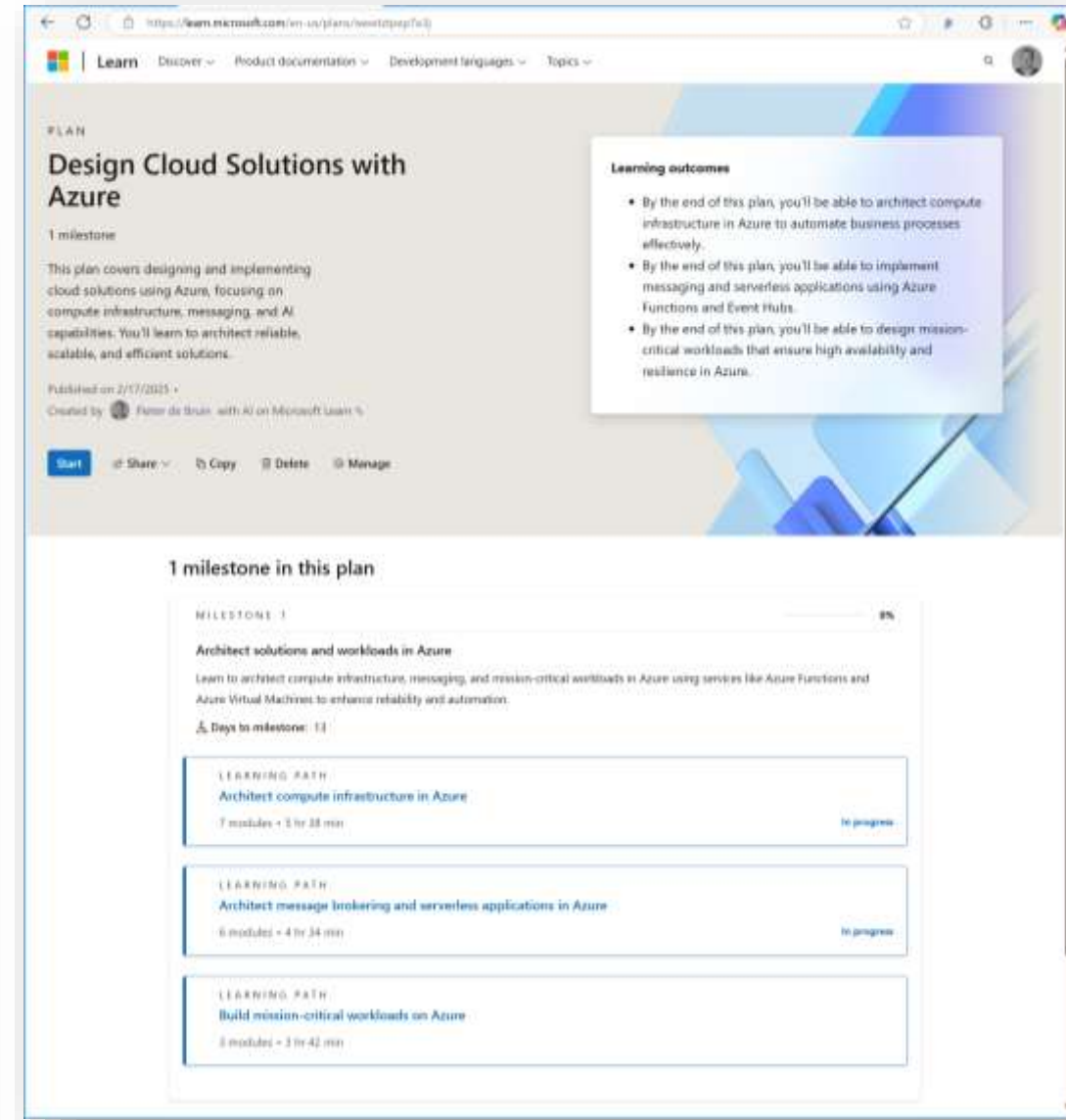
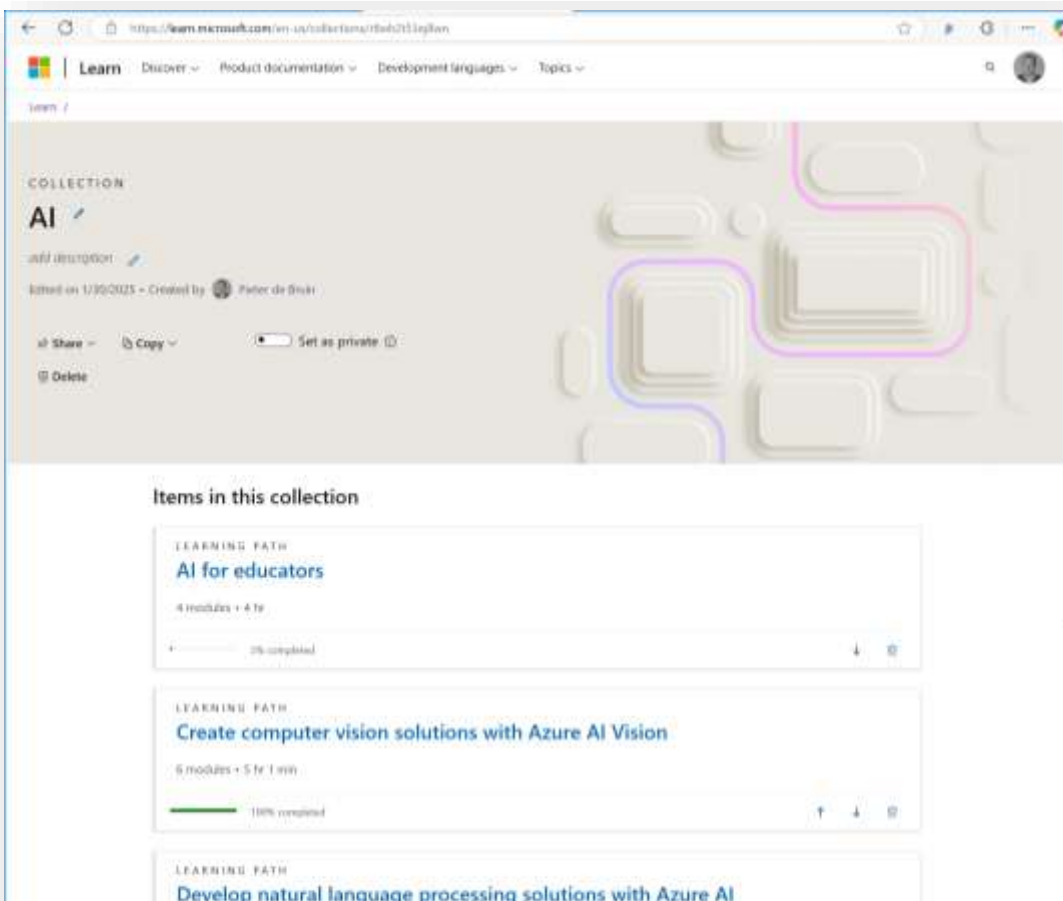
Feedback

Was this page helpful? Yes No

Provide product feedback | Get help at Microsoft Q&A

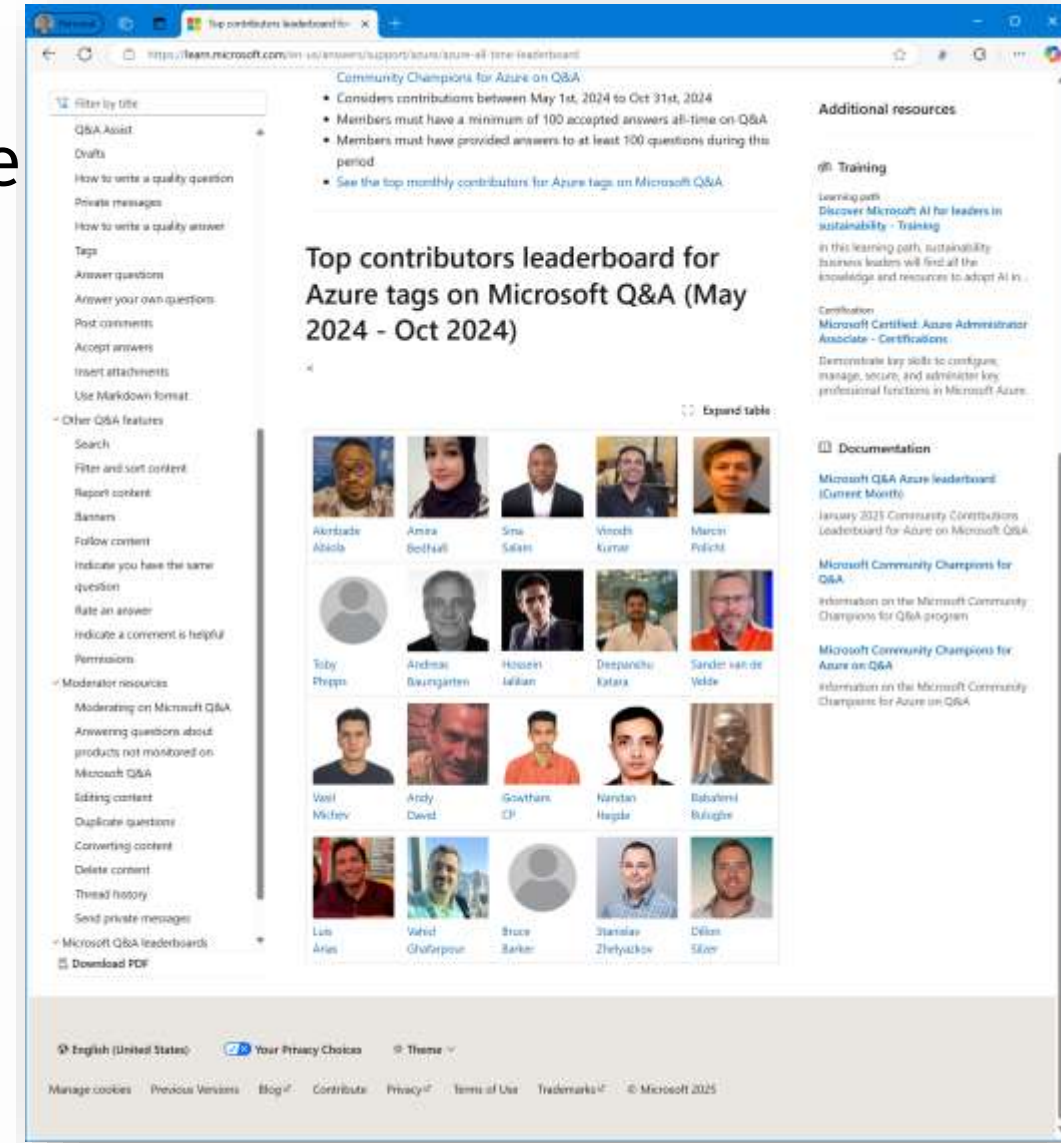
Training contributions

- Create collections and plans
- And share them



Q&A contributions

- Learn deeper by helping others
- Build your brand, one answer at the time
- Helping others can make you feel good



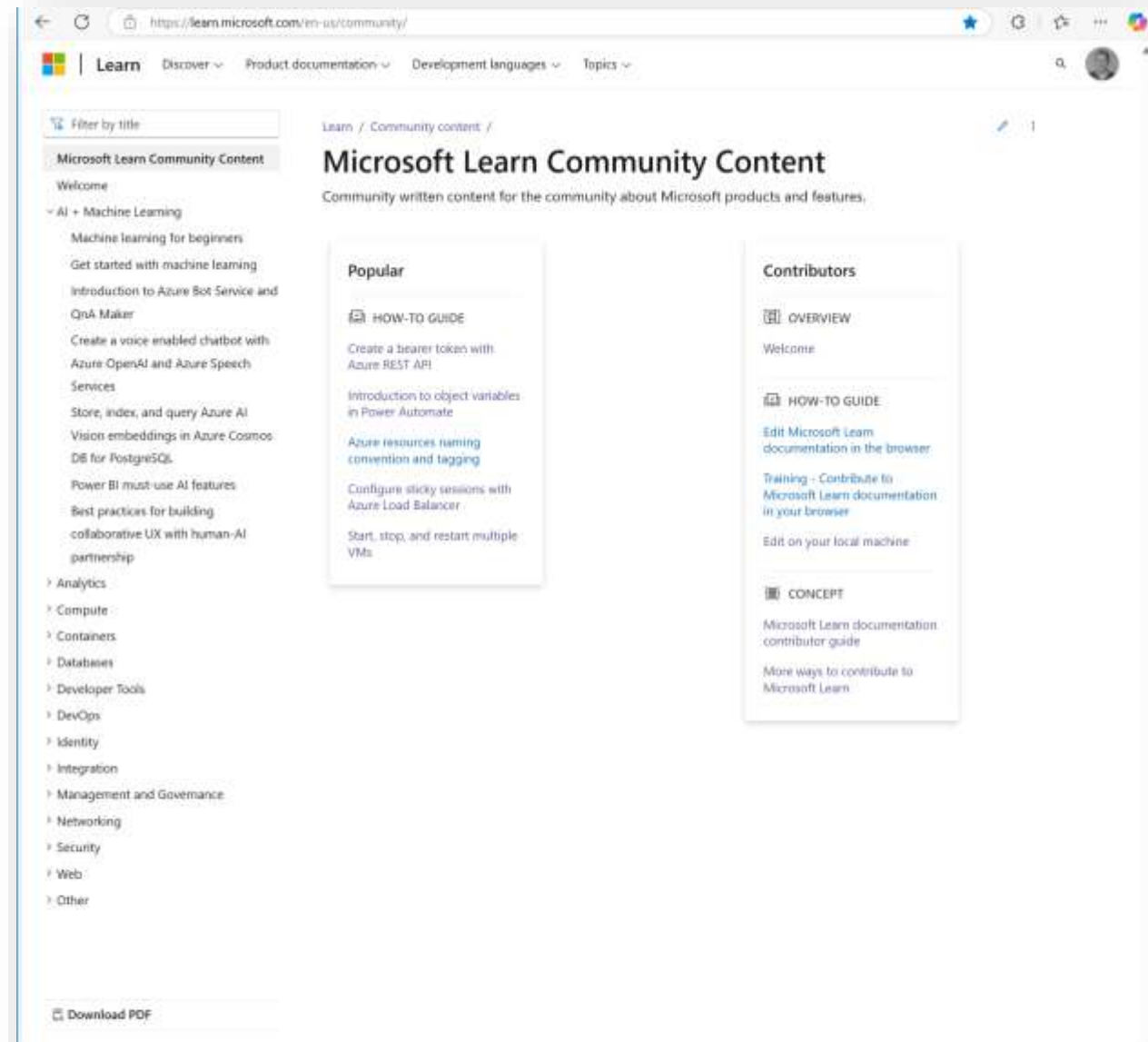
Community Content

- Link your Q&A answers to Learn
- Propose missing content
- Public content by trusted community members

learn.microsoft.com/community/

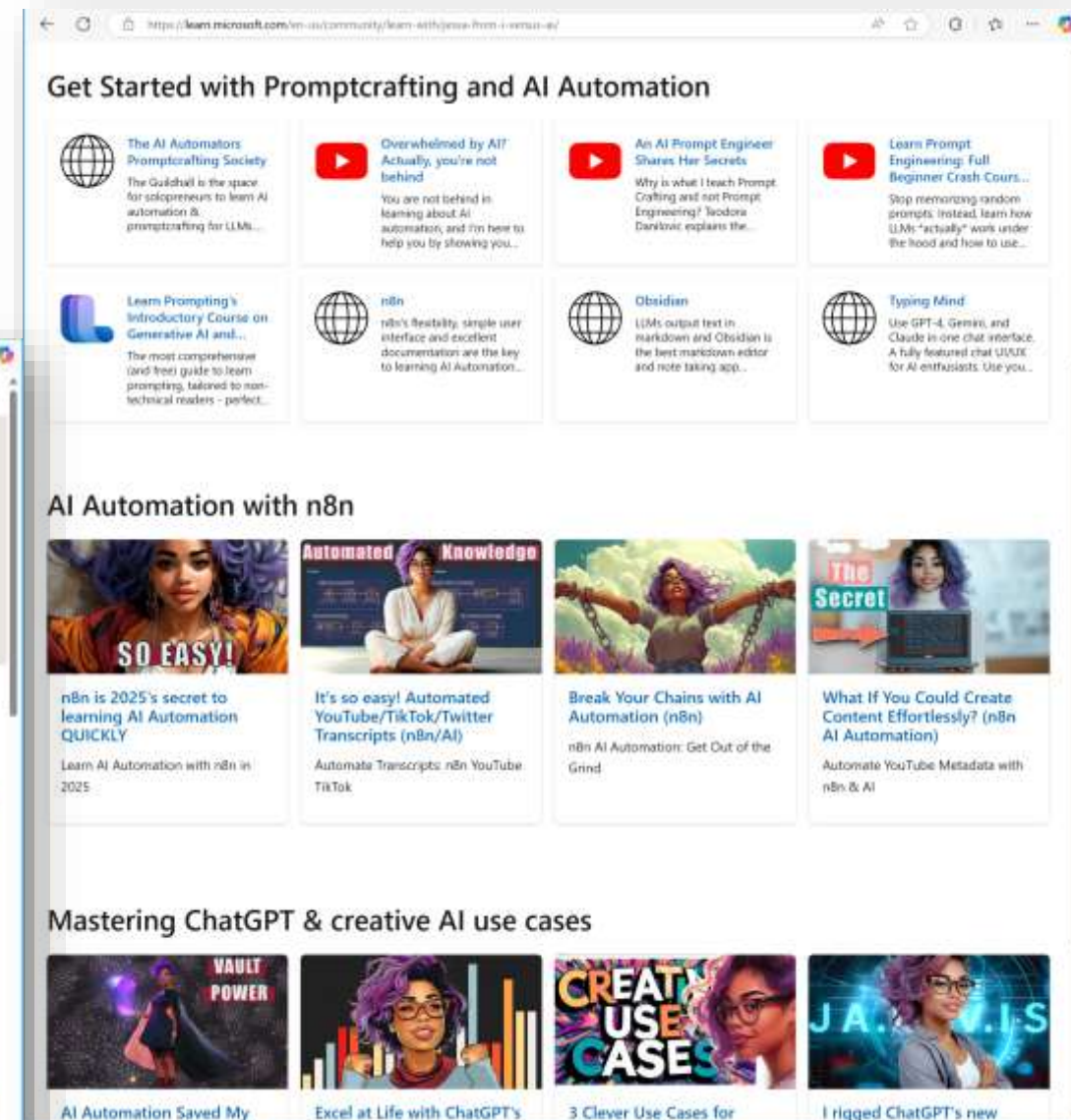
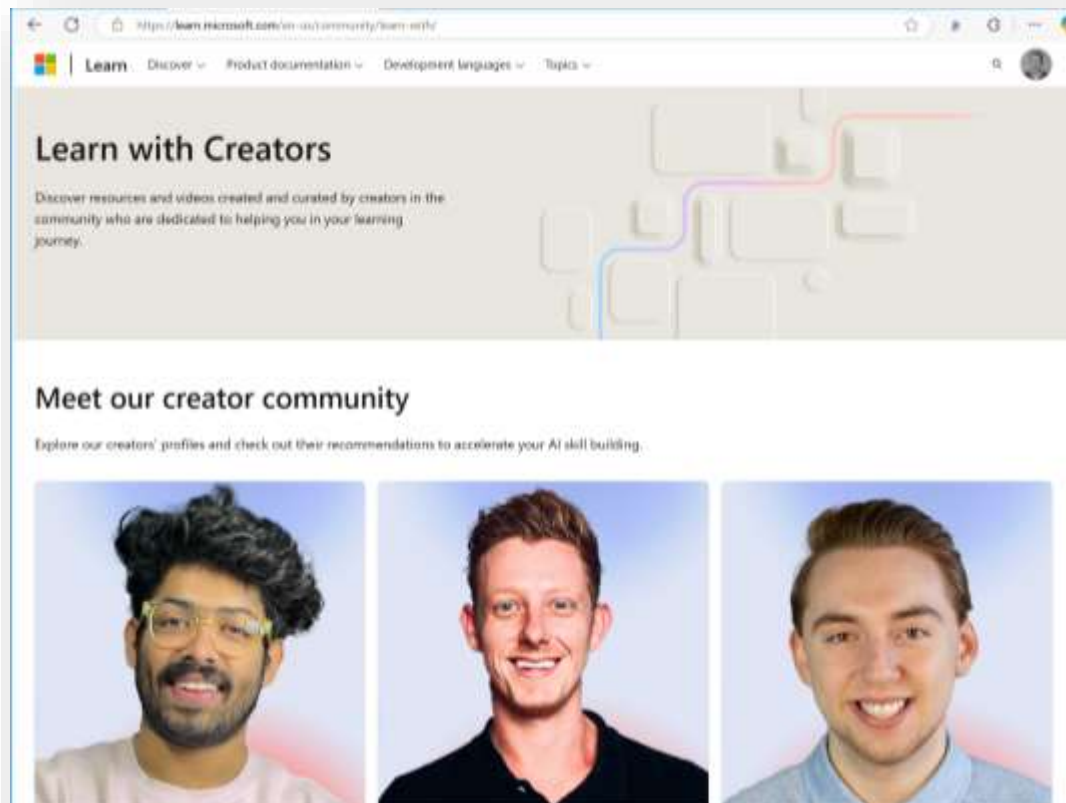
Ask George

g.grammatikos@outlook.com.gr



Learn with

Create
Combine
Connect



Takeaways

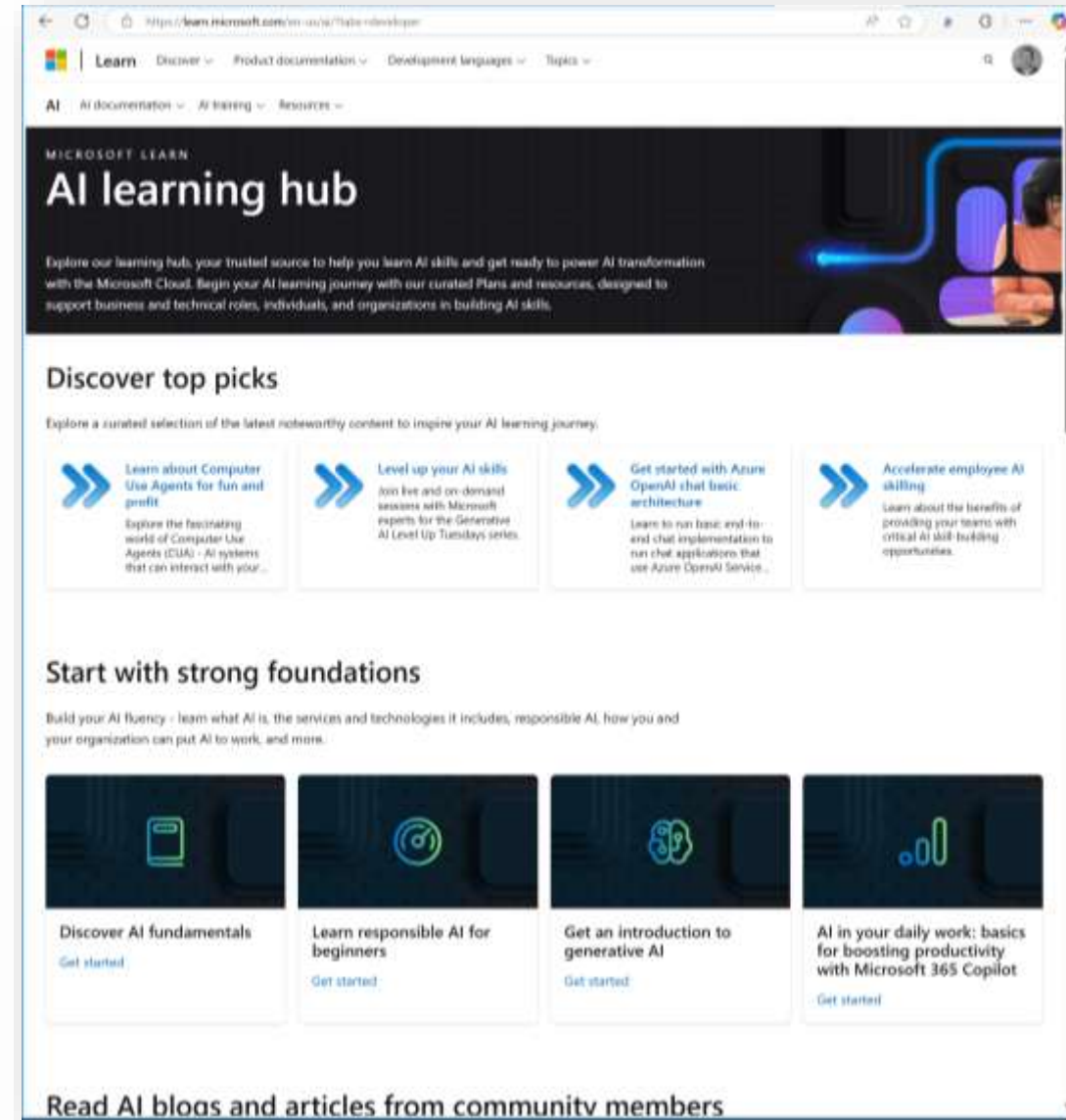
Technology evolves all the time

Learn about artificial intelligence

learn.microsoft.com/ai

Read, try, experiment

Share your feedback and expertise



AI, Cloud & Modern Workplace Conference 2025

20, 21 & 22 February 2025 , Online Conference

Thank you ...

