

# Browser Tabs

## Dev Day Lab Repo

- <https://github.com/AgentFrameworkDev/agent-framework-dev-day/tree/main/labs/dotnet/lab0-hello-world>

## Guardrails

- <https://learn.microsoft.com/en-us/azure/ai-foundry/guardrails/guardrails-overview?view=foundation>
- <https://learn.microsoft.com/en-us/azure/ai-foundry/what-is-foundry?view=foundation&preserve-view=true>

# Wifi

Network = **MSFTGUEST**

Event Attendee Code =

**mseven573wg**

# Thank You Akumina!



Microsoft Partner Akumina was kind enough to sponsor and also lend us their CTO.

<https://partner.microsoft.com/en-us/marketing/usisvshowcase/akumina>

<https://www.akumina.com/>

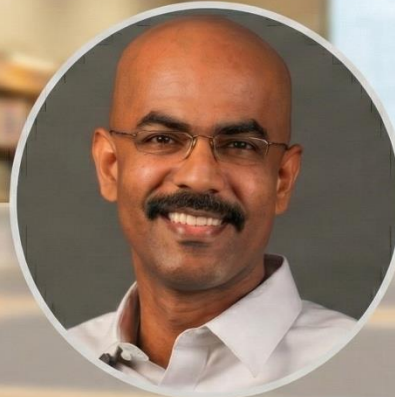
Welcome to our **very first** *or is it our third...*

# Agent Framework Dev Day

## AGENT FRAMEWORK DEV DAY



**JASON**



**UDAI**



**BILL**

# AGENDA

- Coffe/Tea, Talk, Lab, Talk, Lab, Pizza/Sandwiches, Talk, Lab, Break, Talk, Lab, Go Home
- Python vs. C#/.NET
- Laptop readiness?
- Mostly about DOING
- Mostly doing with Agent Framework
- Some Microsoft Foundry in the background

# Topics

1. Hello World
2. Safety
3. MCP
4. Workflow
5. Agentic RAG

<https://bit.ly/billbook>



author

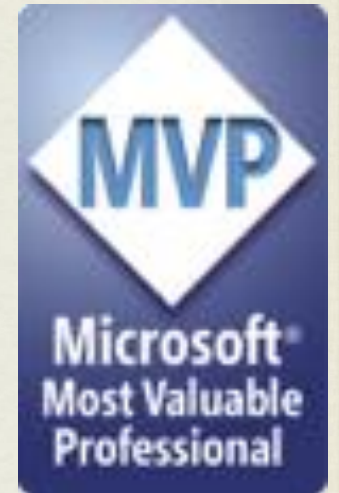
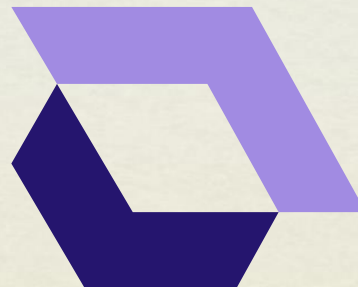
AI x Azure x Cyber



[billw@devpartners.com](mailto:billw@devpartners.com)



CTO at Open Admissions



15x recipient  
(currently  
AI MVP)

founder



<https://meetup.com/bostonazureai>  
[@bostonazureai](#)

# Product Names

1. AutoGen
2. Semantic Kernel
3. Azure AI Studio
4. Azure AI Foundry
5. Azure AI Search



# Product Names

1. AutoGen
2. Semantic Kernel
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4. Azure AI Foundry
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1. Agent Framework
2. Microsoft Foundry
3. Foundry IQ

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1. AutoGen
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1. Agent Framework
2. Microsoft Foundry
3. Foundry IQ

# MCP



Standards-based

- Works at scale
- Evolving quickly

## Agent

1. LLM powered
2. May have memory
3. Autonomous
4. Input→Goal→Outcome
5. Long-running, multi-step
6. Has agency to use tools

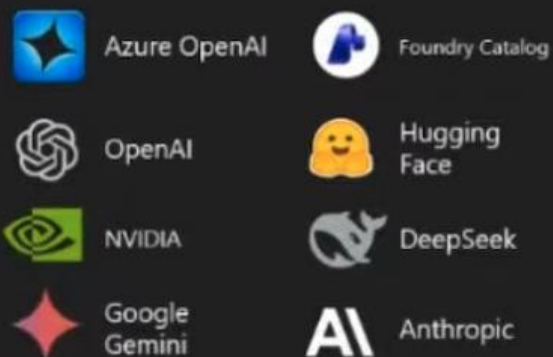
Can change state

# What is Agent Framework

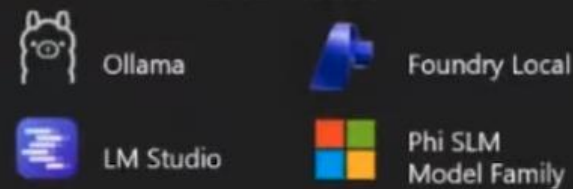
- Preview!
- Python & .NET
- Cross platform
- Local
- Standards-based (MCP, A2A, ChatKit, AG UI, ...)
- Open Source

<https://github.com/microsoft/agent-framework>

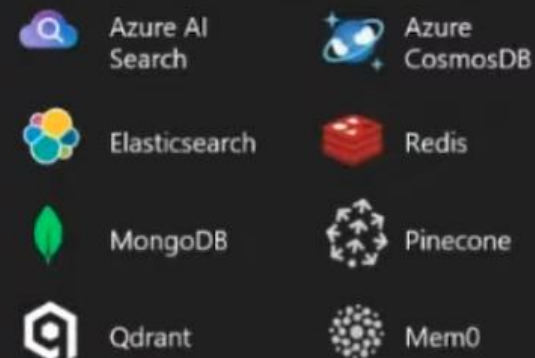
### AI Services



### Local models



### Memory Services and Agent Memory



# Microsoft Agent Framework

## AI and Agent Orchestration

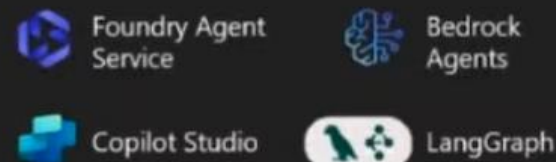


.NET



Python

### Agent Services



### Plugins



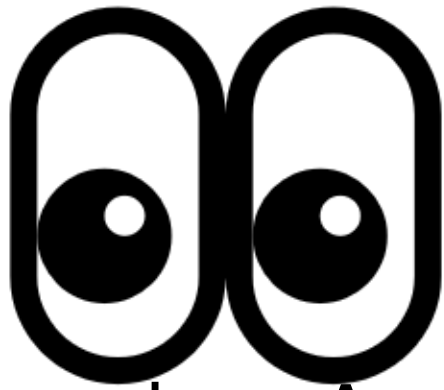
### UI Frameworks



### Filters and telemetry

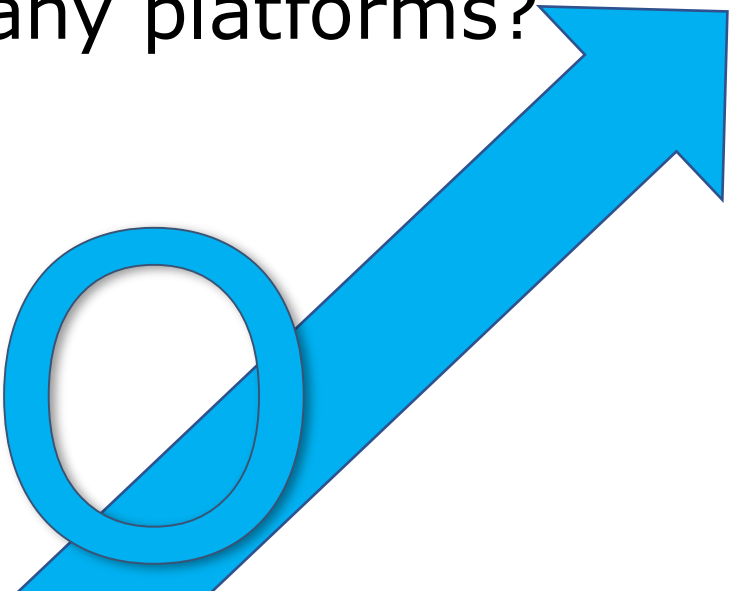


# A tiny bit of Object Oriented Programming



How does Agent Framework support so many platforms?

DEMO



# Repo Overview



A quick tour of the AF Dev Day repo

DEMO

A large, solid blue arrow pointing upwards and to the right. The arrow is thick and has a simple, clean design. It passes through the letter 'O' in the word 'DEMO', which is written in a large, blue, sans-serif font.



https://github.com/AgentFrameworkDev/agent-framework-dev-day

FrameworkDev / **agent-framework-dev-day**

🔍 Type  to search

[Issues](#) [Pull requests](#) [Agents](#) [Actions](#) [Projects](#) [Security](#) [Insights](#) [Settings](#)



**agent-framework-dev-day**

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[1 Branch](#) [0 Tags](#)

🔍 Go to file

t

[Add file](#)



[Code](#)



**codingoutloud** Adjust README.md docs

📁 labs

Adjust README.md

📁 tools/LabKeyEncrypter

Move LabKeyEncrypter

📄 .gitignore

update gitignore

📄 LICENSE

Initial commit

📄 README.md

Adjust README.md

📄 VSCode-Extensions.md

Add Polyglot Notebook

Local

Codespaces

📄 Clone

[HTTPS](#) [SSH](#) [GitHub CLI](#)

<https://github.com/AgentFrameworkDev/agent-framework-dev-day>

Clone using the web URL.

📄 Open with GitHub Desktop

📄 Download ZIP

[README](#)

[MIT license](#)



# Agent Framework Dev Day

Agent Framework Dev Day is a full-day, instructor-led series of labs that showcase the [Microsoft Agent Framework](#) and adjacent tooling across both .NET and Python ecosystems.

## About

In-person, all-day, hands-on, and free: Agent Framework Workshop

[Readme](#)

[MIT license](#)

[Activity](#)

[Custom properties](#)

★ 0 stars

👁 0 watching

🍴 0 forks

[Audit log](#)

[Report repository](#)

## Releases

No releases published

[Create a new release](#)

## Packages



# Download the Repo



**git clone git clone**

**<https://github.com/AgentFrameworkDev/agent-framework-dev-day.git>**

# DEMO



The Password!    Needed for lab0

**Patriots16-Chargers3-  
TexansNext**

Go!

# Microsoft Foundry Guardian



**Along-side Lab1**

DEMO 

# After Today

## SWAG

### Materials

- Check the repo for decks
- PR if you have a fix

### SPONSORSHIP ideas

### VENUE ideas

## Survey

- Suggestions and feedback
- Food, venue, timing, and other logistics
- Topics, understanding, and other content/delivery topics
- Prep instructions
- Communications clarity

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<https://partner.microsoft.com/en-us/marketing/usisvshowcase/akumina>

<https://www.akumina.com/>

# Questions?



Connect with Bill

Bill Wilder  
@codingoutloud

[blog.codingoutloud.com](http://blog.codingoutloud.com)

[linkedin.com/in/billwilder](https://linkedin.com/in/billwilder)

See you at  
**Boston Azure** 🤖 **AI** 🤖  
**[bostonazureai.org](http://bostonazureai.org)**  
**[@bostonazureai](https://twitter.com/bostonazureai)**  
**for VIRTUAL & IN-PERSON EVENTS**







# Resources

- **Bill's demo tool for comparing two strings via cosine similarity analysis** (will vectorize each string using Azure AI-hosted text-embedding-3-large model, then use math operations to apply cosine similarity analysis to come up with a similarity score theoretically between -1.0 and 1.0, but practically usually positive numbers).

<https://funwithvectors.com>

- **OpenAI Tool for parsing strings into tokens**

<https://platform.openai.com/tokenizer>

# A Brief History of AI

Yeah, I know, this is a REALLY brief history.

[github.com/crackingai/abriefhistoryofai](https://github.com/crackingai/abriefhistoryofai)

/in/billwilder



@codingoutloud

HELLO  
my name is

*Bill*

<https://github.com/crackingai/abriefhistoryofai>

# Polymorphic

- Bedrock, GCP, OpenAI, Anthropic
  - Idiomatic access to Microsoft Foundry
- IAgent
- AIProjectClient
- AzureAIClient
- AIAgent

# VS Code Extensions



AgentFrameworkDev / **agent-framework-dev-day**



**Code**



Issues



Pull requests

1



Agents



Actions



Projects



Security



Insights



Settings



main

**agent-framework-dev-day** / [labs](#) / [dotnet](#) / [lab0-hello-world](#) / [begin](#) / [.vscode](#) / **extensions.json**



**codingoutloud** Recommend VS Code extensions for .NET side

**Code**

Blame

9 lines (9 loc) · 201 Bytes

```
1  {
2    "recommendations": [
3      "ms-dotnettools.csdevkit",
4      "ms-dotnettools.csharp",
5      "ms-dotnettools.vscode-dotnet-runtime",
6      "github.copilot",
7      "ms-windows-ai-studio.windows-ai-studio"
8    ]
9  }
```

# OTel

- <https://opentelemetry.io/docs/specs/semconv/gen-ai/>
- <https://learn.microsoft.com/en-us/agent-framework/user-guide/observability>