

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

Wifi

Network = **MSFTGUEST**

Event Attendee Code =

**msevent573wg**

# 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

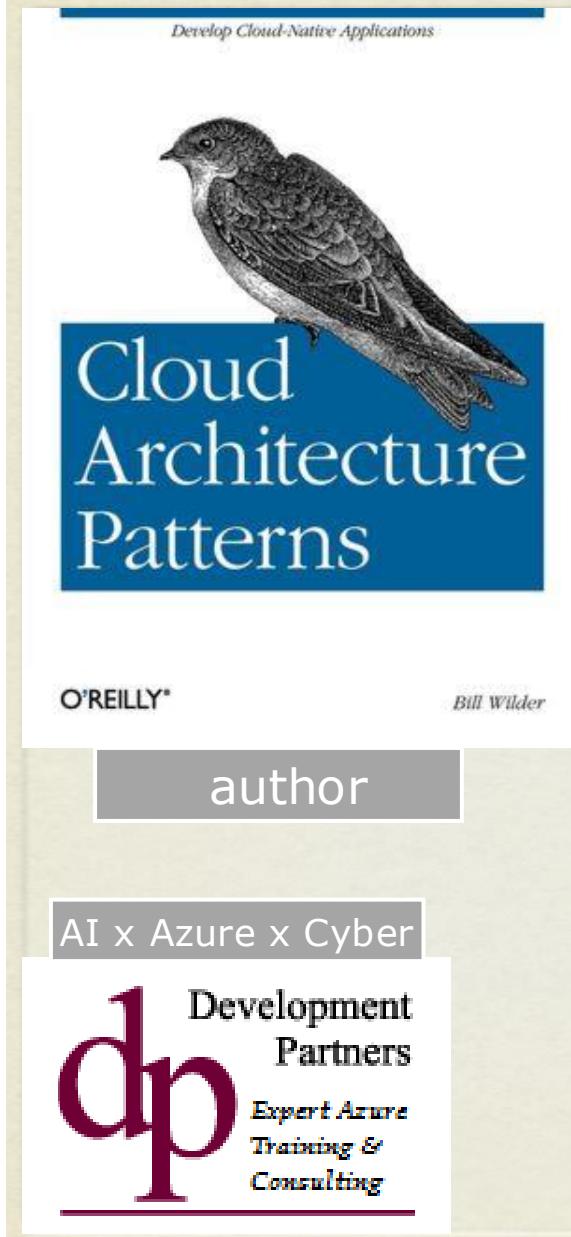
# AGENDA

- 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

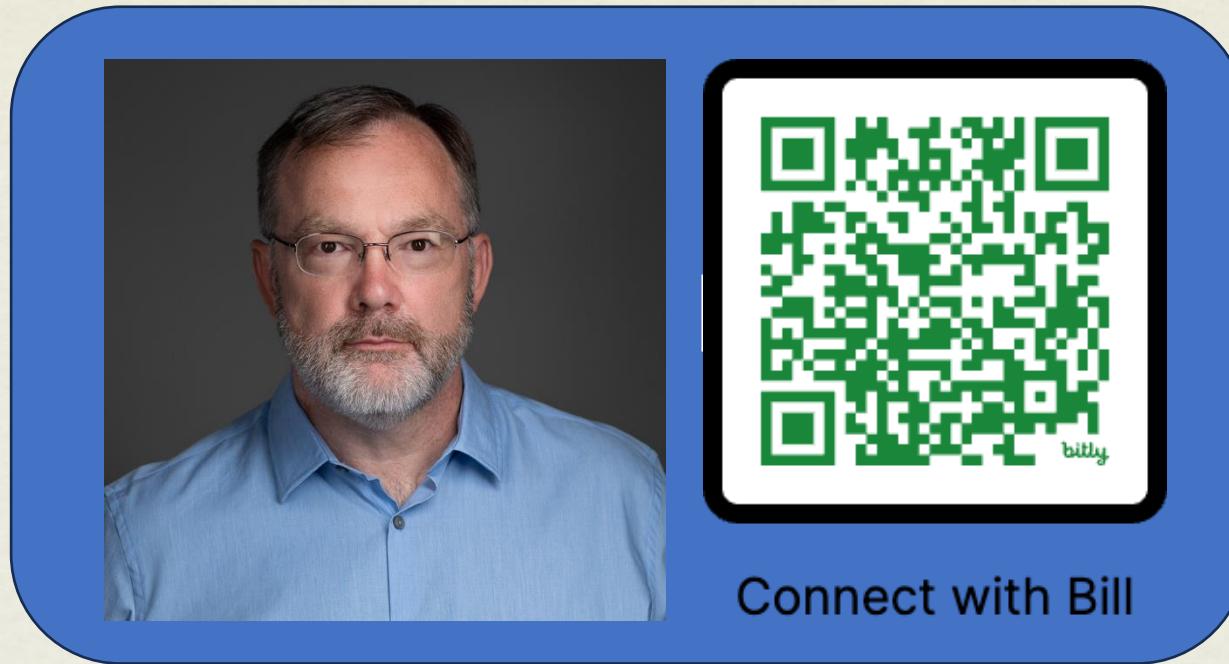
# Topics

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

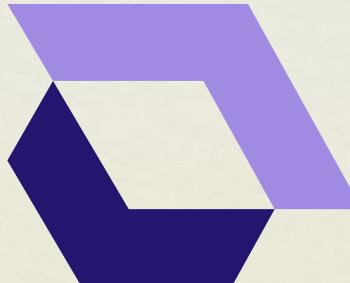
<https://bit.ly/billbook>



billw@devpartners.com



CTO at Open Admissions



<https://meetup.com/bostonazureai>  
@bostonazureai



15x recipient  
(currently  
AI MVP)



founder

# 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
- 3. Azure AI Studio
- 4. Azure AI Foundry
- 5. Azure AI Search
- 1. Agent Framework
- 2. Microsoft Foundry
- 3. Foundry IQ

# Product Names

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

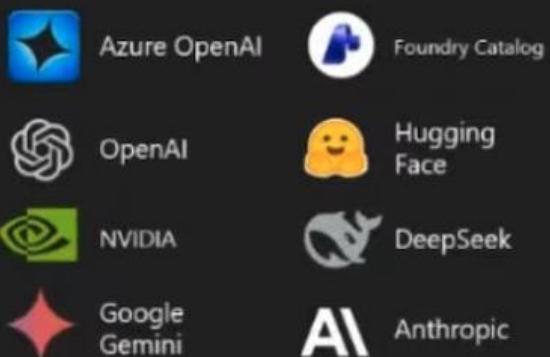
Can change state

# 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>

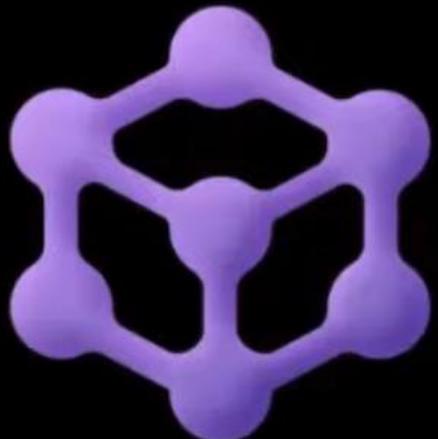
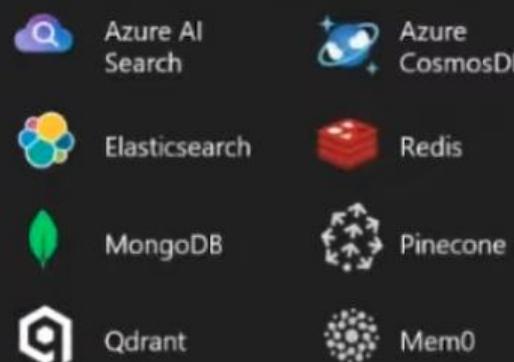
## AI Services



## Local models



## Memory Services and Agent Memory



# Microsoft Agent Framework

## AI and Agent Orchestration



.NET

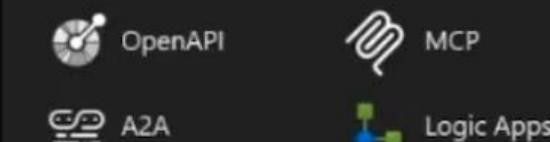


Python

## Agent Services



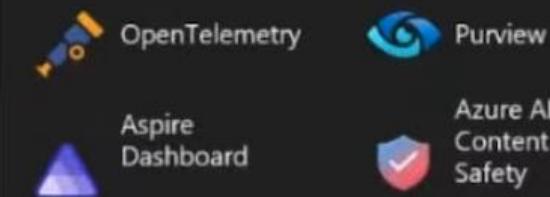
## Plugins



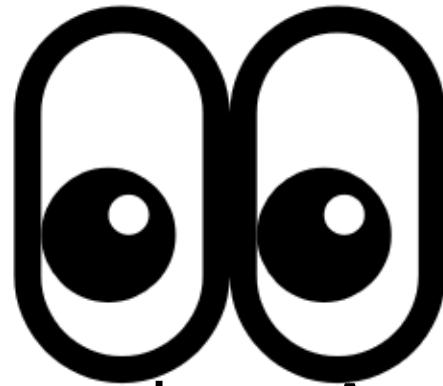
## UI Frameworks



## Filters and telemetry

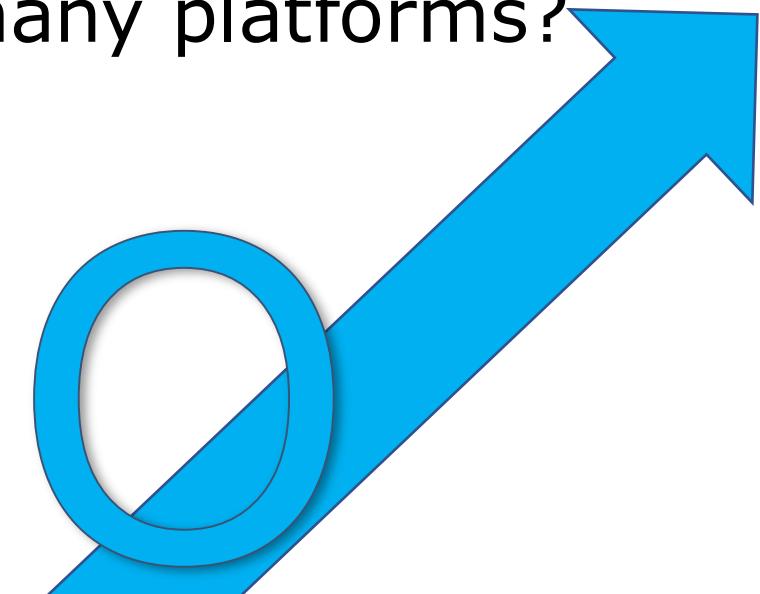


# A tiny bit of Object Oriented Programming



How does Agent Framework support so many platforms?

**DEMO**

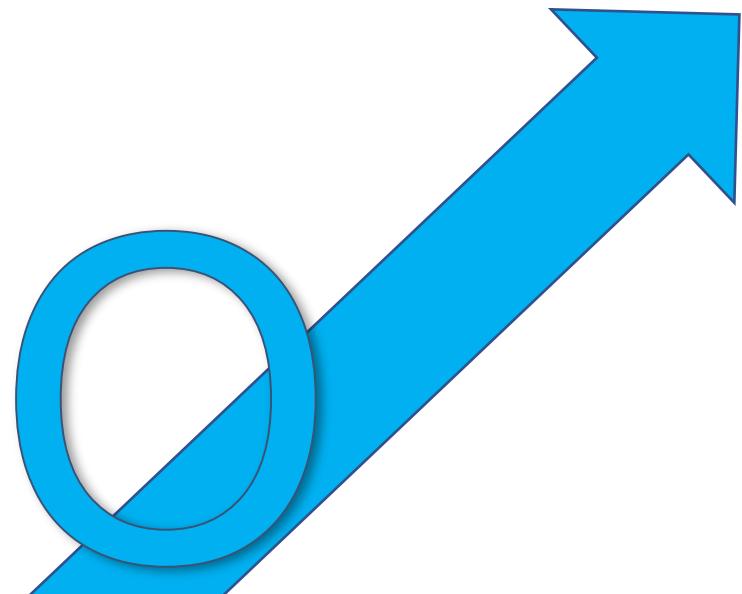


# Repo Overview



A quick tour of the AF Dev Day repo

DEMO





<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

Public

Edit Pins

Watch 0

Fork 0

main

1 Branch

0 Tags

Go to file

Add file



Code



codingoutloud Adjust README.md docs



labs

Adjust README.md



tools/LabKeyEncrypter

Move LabKeyEncry



.gitignore

update gitignore



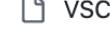
LICENSE

Initial commit



README.md

Adjust README.md



VSCode-Extensions.md

Add Polyglot Noteb

Local

Codespaces

Clone

?

HTTPS

SSH

GitHub CLI

https://github.com/AgentFrameworkDev/agent-

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, hand-led, and free: Agent Fra Workshop

Readme

MIT license

Activity

Custom properties

0 stars

0 watching

0 forks

Audit log

Report repository

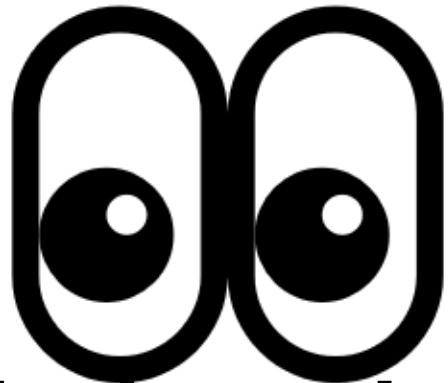
## Releases

No releases published

[Create a new release](#)

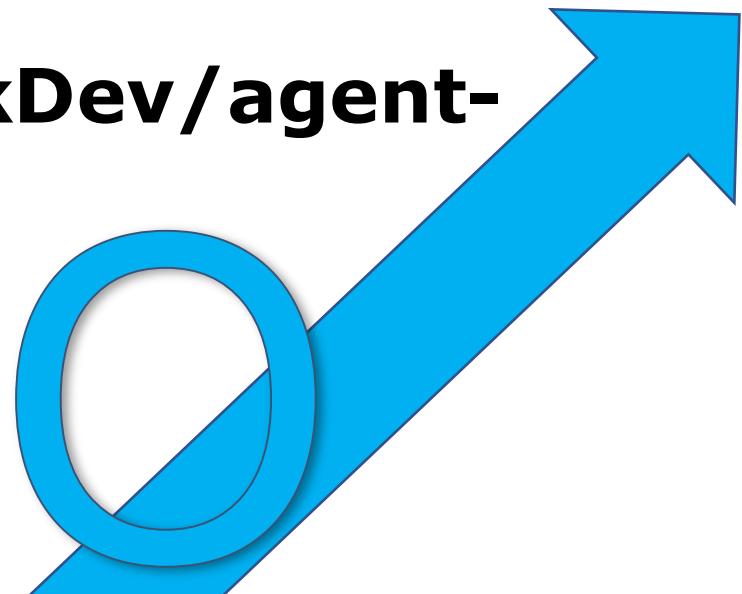
## Packages

# Download the Repo



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

# DEMO

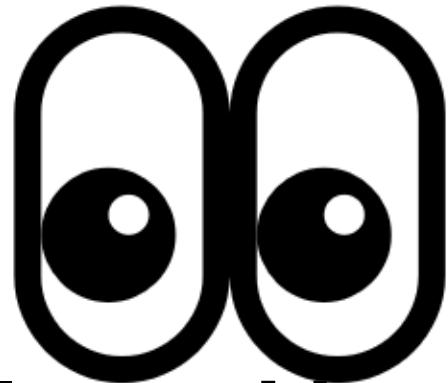


The Password!    Needed for lab0

**Patriots16-Chargers3-  
TexansNext**

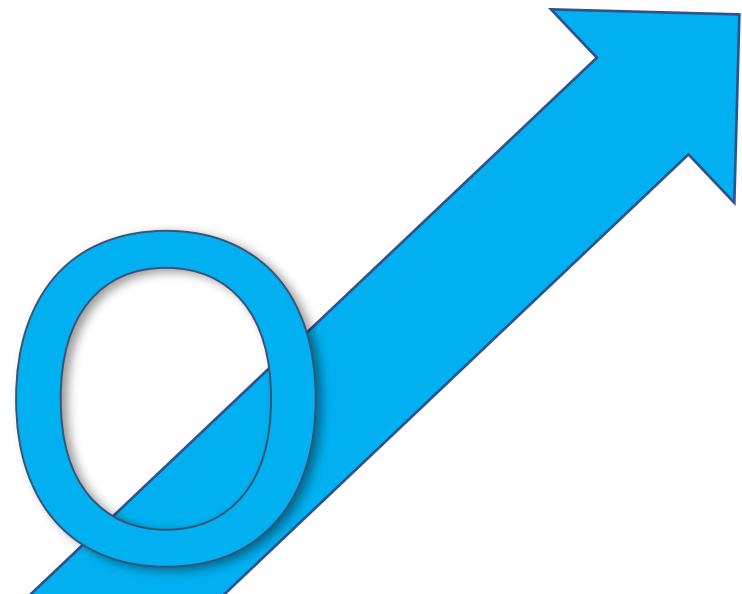
**Go!**

# 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/>



Connect with Bill

Bill Wilder  
@codingoutloud

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

# Questions?

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/crankingai/abriefhistoryofai](https://github.com/crankingai/abriefhistoryofai)

/in/billwilder



@codingoutloud

HELLO  
my name is

*Bill*

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

# Polymorphic

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

# VS Code Extensions

A screenshot of a GitHub repository page for 'AgentFrameworkDev / agent-framework-dev-day'. The repository navigation bar includes 'Code' (highlighted with a red underline), 'Issues', 'Pull requests', 'Agents', 'Actions', 'Projects', 'Security', 'Insights', and 'Settings'. Below the navigation bar, the file path 'agent-framework-dev-day / labs / dotnet / lab0-hello-world / begin / .vscode / extensions.json' is shown, with 'extensions.json' highlighted by a red box. The main content area displays the JSON code:

```
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>