

HELLO, MY NAME IS ...

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Microsoft Azure MVP



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Tidjani Belmansour

LEVERAGING AI INTO YOUR EXISTING APPLICATIONS

ConFoo.ca
DEVELOPER CONFERENCE

**HOW MANY OF
YOU ARE...**

DEVELOPERS



**HOW MANY OF
YOU HAVE...**

**INTEGRATED AI
INTO THEIR
APPLICATIONS**

































**HOW MANY OF
YOU ARE...**

AI EXPERTS



We live in the era of AI

AI HAS TAKEN OUR LIVES BY STORM

CATEGORY	TOOLS			
AI Bot	 ChatGPT	 Google Bard	 Bing AI	 Claude
Video Creation	 Runway	 HeyGen	 Veed.io	 Pictory
Images	 Midjourney	 DALL-E 3	 Leonardo.ai	 Firefly
Presentation	 Tome	 Slides.ai	 Decktopus	 Beautiful.ai
Research	 Harpa	 Perplexity	 Glasp	 ChatPDF
Prompt Writing	 G-Prompter	 OctiAI	 Snack Prompt	 PromptPal
Productivity	 Taskade	 Audio Pen	 Notion AI	 Xembly
Writing	 Copy.ai	 Grammarly	 Jasper AI	 Wordtune

The Artificial Creativity Landscape



Linguistic Creativity

ALL-Purpose Text Generation



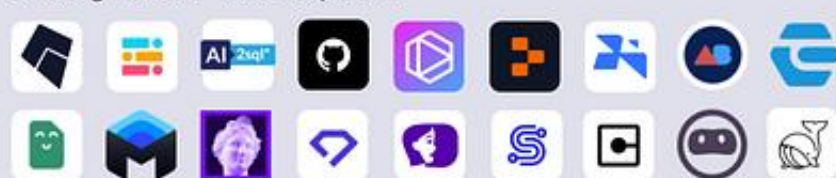
Marketing & Sales Copy



Text Optimization



Coding & Web Development



Musical Creativity

Sound & Music Generation

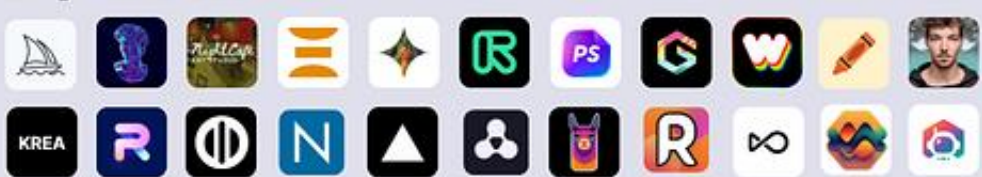


Voice Synthesis



Visual & Artistic Creativity

Image Generation



Video Generation



Design



Scientific Creativity



Other

Knowledge Management & Search



Customer Support & Automation



Characters



Gaming



Erotica



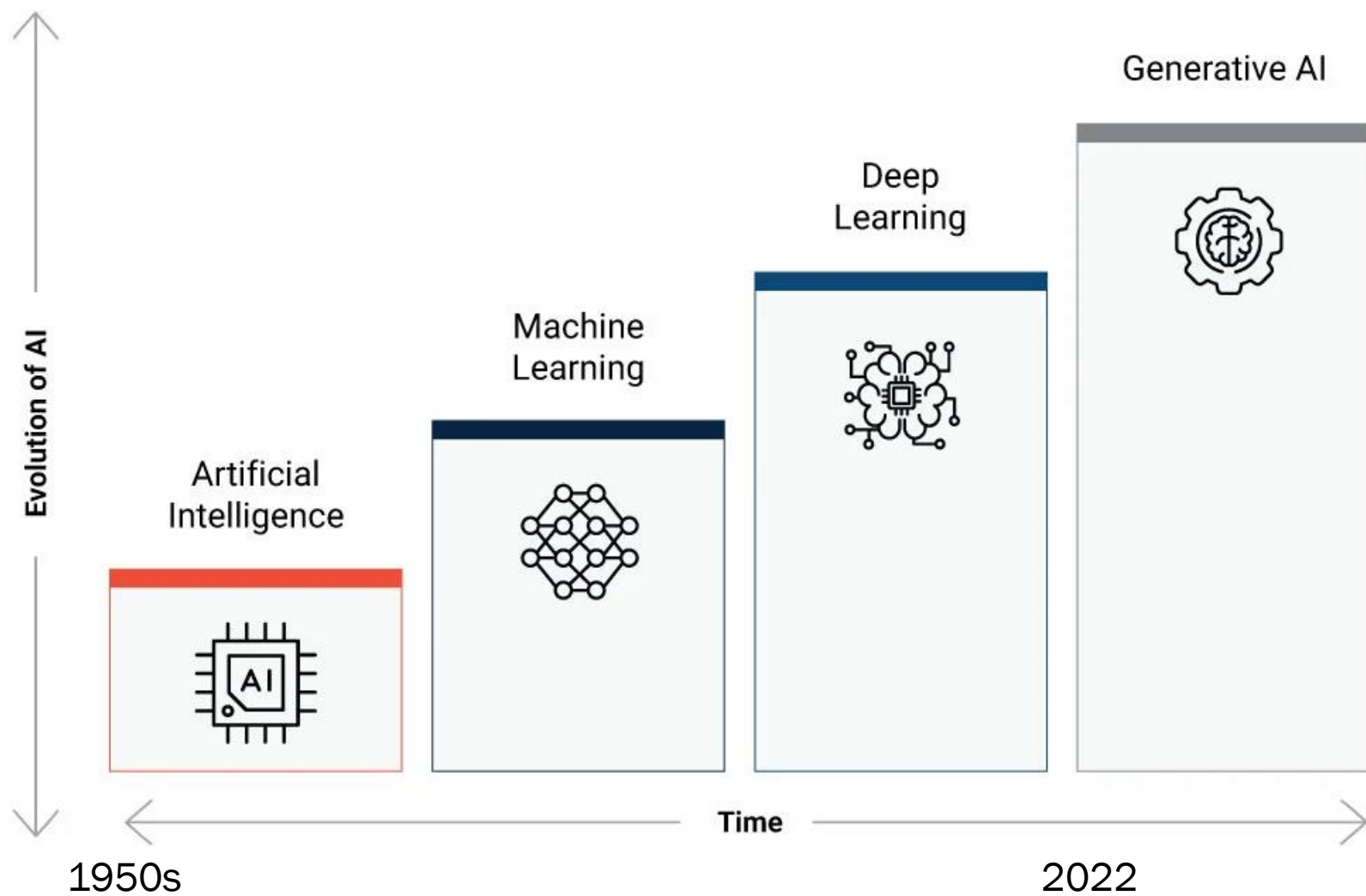
Market Intelligence



BUT THE MOST POPULAR ONE IS ...



AI IS NOT NEW ...



... SO WHY ALL THE BUZZ ? AND WHY NOW ?

BECAUSE IT IS GENERATIVE !

Roles required to build an AI solution

I'VE DONE VERY EXTENSIVE RESEARCH

Découvrez un aperçu anticipé de ChatGPT dans votre langue.

Rejoignez l'alpha

ChatGPT 3.5 ▾

what roles i need in my company to build an AI solution?



ChatGPT

Building an AI solution for your company requires a multidisciplinary team with expertise in various areas. Here are some key roles you may need in your AI team:

1. Project Manager:

- Responsible for overseeing the entire AI project, including planning, budgeting, and ensuring timely delivery.
- Acts as a liaison between technical and non-technical stakeholders.

2. Data Scientist:

- Analyzes and interprets complex data sets to inform business decision-making.
- Designs and develops machine learning models and algorithms.
- Works with large datasets, cleans and preprocesses data.

3. Machine Learning Engineer:

- Implements machine learning models into production systems.
- Optimizes algorithms for scalability and performance.
- Collaborates with data scientists to develop models effectively.

4. Data Engineer:

Message ChatGPT...



ROLES IN THE AI ERA

SOME EXISTING ONES ...

- Project Manager
- Software Developer
- Domain Expert
- UX Designer
- Business Analyst
- IT Security Specialist
- QA/Test Engineer
- DevOps Engineer

ROLES IN THE AI ERA

... AND SOME NEW ONES

■ Data Scientist:

- Designs and develops machine learning models and algorithms
- Works with large datasets, cleans and preprocesses data

■ Machine Learning Engineer:

- Implements machine learning models into production systems
- Optimizes algorithms for scalability and performance

ROLES IN THE AI ERA

... AND SOME NEW ONES

- **Data Engineer:**

- Ensures data quality, security, and availability

- **Ethics and Compliance Officer:**

- Ensures that the AI solution complies with ethical standards and legal regulations
- Addresses potential biases in data and models to avoid unintended consequences

I AM A DEVELOPER

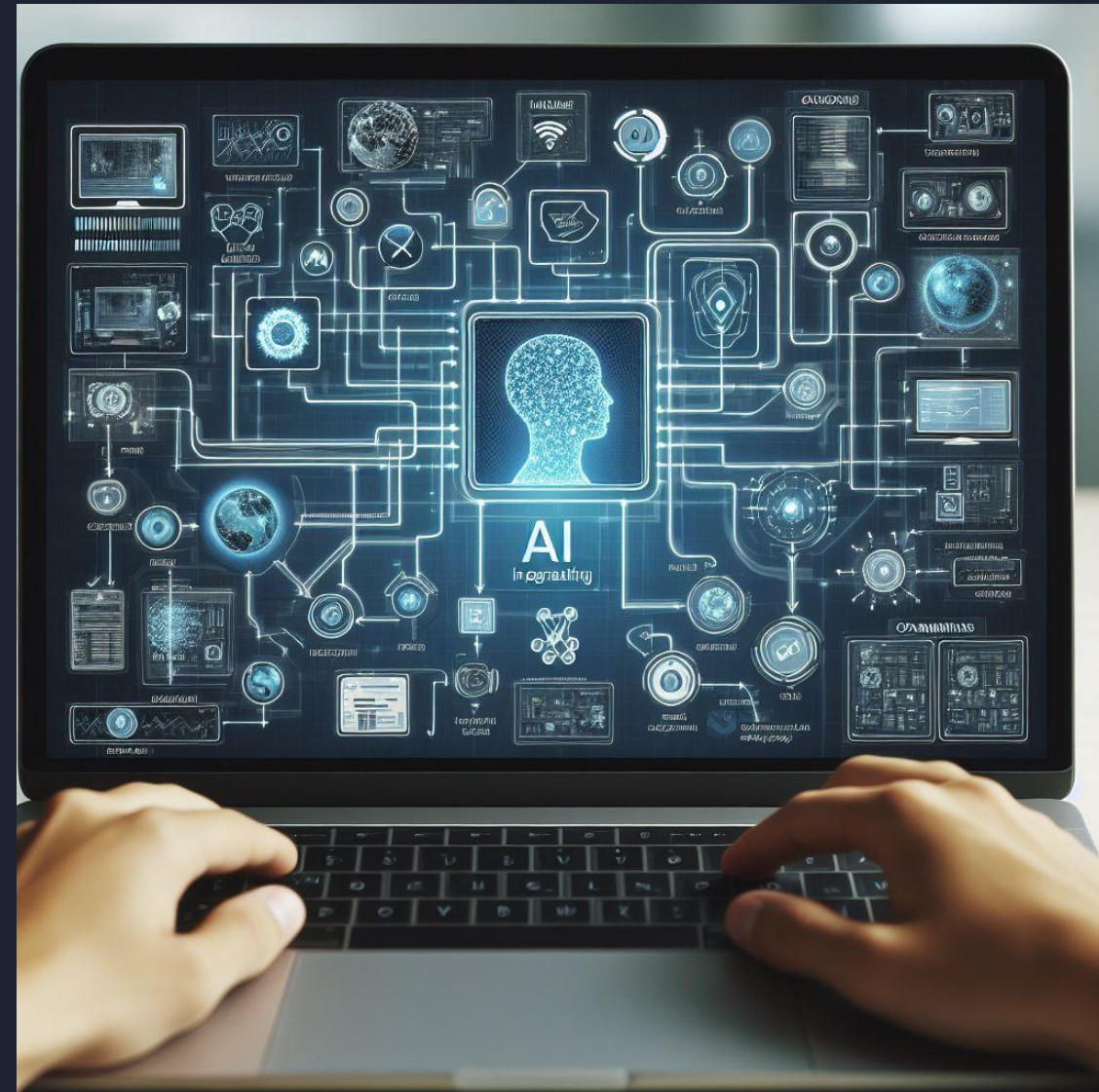
I'M NO AI EXPERT ...



**THEN, WHY I'M HERE
TALKING ABOUT AI ?**



WHY INTEGRATE AI INTO EXISTING APPLICATIONS ?



WHY THIS SESSION ?



Let's leverage AI into our existing app!



Ali Amine Ghazali – Cofomo – Azure Center of Excellence

AI Visionary and enthusiast, IT strategic advisor
Cloud solutions architect
Azure & AWS certified

HERE'S WHERE WE'LL START

Our Product Catalog

What are you looking for?

Search...

Search



Xbox One S

\$499.99

a powerful, 4k gaming console from Microsoft



PlayStation 5

\$399.99

a powerful, 4k gaming console from Sony, Microsoft's rival in the gaming world



Nintendo Switch

\$299.99

a versatile gaming console from Nintendo



Xbox Series X

\$599.99

the latest gaming console from Microsoft, offering powerful performance. Supports 4K display.



PlayStation 4

\$299.99

a popular gaming console from Sony, predecessor to PlayStation 5



Nintendo Switch Lite

\$199.99

a compact and lightweight version of Nintendo Switch



Xbox One X

\$399.99

a previous generation gaming console from Microsoft, offering enhanced performance



PlayStation 3

\$199.99

a classic gaming console from Sony, predecessor to PlayStation 4

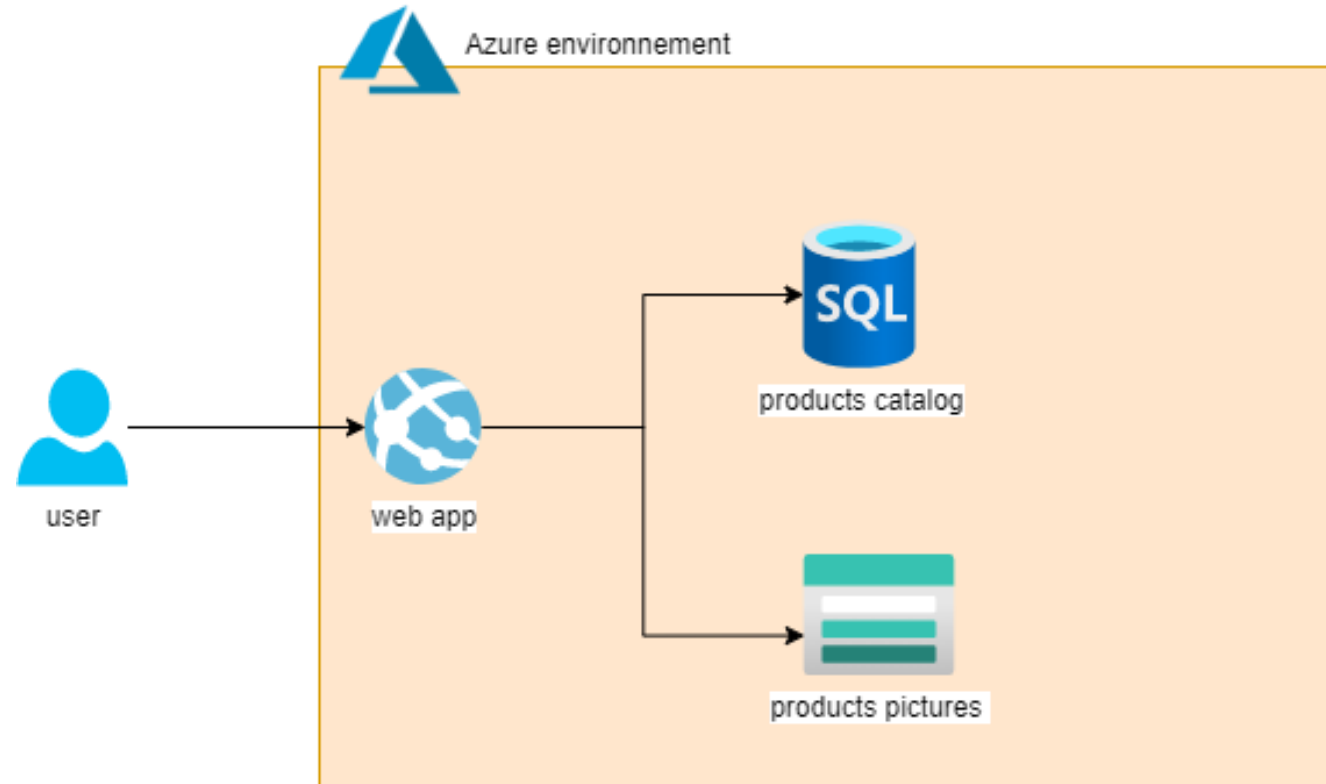


Nintendo 3DS

\$149.99

a portable gaming console from Nintendo, offering 3D gameplay

THE ARCHITECTURE LOOKS LIKE THIS



HOW DO WE SEARCH THROUGH THIS CATALOG ?

FILTERS

- Not flexible enough

Hide out of stock items ☐

☐ New In (3)

On Offer +

Brand -

Search brands

☐ AND/OR (17)

☐ 7 For All Mankind (20)

☐ AG (22)

☐ AllSaints (13)

☐ Barbour (1)

☐ Betty & Co. (10)

☐ Betty Barclay (41)

☐ Boden (15)

☐ Calvin Klein (8)

☐ Collection WEEKEND by John Lewis

Jean Cut +

Size +

Colour +

Jean Rise +

Jean & Trouser Length +


Price +

Shop by Fit +

Avg. Review Rating +

Sort by: ▾

BESTSELLER



Quick view


hush Boyfriend Jeans, Denim

£75.00

★★★★☆ (1)

Exclusive to John Lewis & Partners and hush

BESTSELLER




Mint Velvet Dakota Boyfriend Jeans

£79.00

★★★★★ (9)

BESTSELLER




French Connection Mid Rise Skinny Rebound Jeans

£60.00

★★★★★ (3)

BESTSELLER




hush Moritz Cropped Jeans, Blue Authentic

£75.00

★★★★★ (9)

Exclusive to John Lewis & Partners and hush

BESTSELLER




hush Agnes Straight Fit Denim Jeans, Vintage Blue

£75.00

★★★★★ (181)

Exclusive to John Lewis &

BESTSELLER




Levi's 724 High Rise Straight Jeans, To The Nine

£90.00

★★★★★ (18)

★★★★★

BESTSELLER




NYDJ Marilyn Straight Leg Regular Jeans, Cooper Blue

£139.95

★★★★★ (28)

★★★★★

BESTSELLER



hush Ingrid Skinny Jeans, Mid Blue

£75.00

★★★★★ (32)

Exclusive to John Lewis &

1 2 3 4 Next

HOW DO WE SEARCH THROUGH THIS CATALOG ?

■ SEARCH BAR

- Keyword, full-text search
- Syntactic, not semantic

amazon Try Prime John's Amazon.com Today's Deals Gift Cards Sell Help

Shop by Department ▾ Search All ▾ Mobile **Go** Hello, Your

1-16 of 10,604,180 results for "Mobile"

Show results for

- Baby Products** ▾
 - Nursery Mobiles
 - Nursery Bedding
 - Baby Gift Baskets
- Cell Phones & Accessories** ▾
 - Unlocked Cell Phones
 - Prepaid Phones
 - Cell Phone Accessories
- Toys & Games** ▾
 - Crib Toys & Musical Mobiles
 - Baby Car Toys & Stroller Toys
 - Baby & Toddler Toys
 - Baby Musical Toys
- Home & Kitchen** ▾
 - Outdoor Decor Mobiles
 - Home Décor Products

+ See All 32 Departments


Refine by


Eligible for Free Shipping
Free Shipping by Amazon


Brand

- ☐ Samsung
- ☐ Mobile

Related Searches: [mobile phone](#), [mobile phones](#), [phone](#).

 **Moto G - Boost Mobile Prepaid Phone (Boost)** by MOTCB (Oct 27, 2013)
\$76.99 new (7 offers)
\$53.99 used (9 offers)
★★★★★ (210)
Trade-In eligible for an Amazon gift card
Electronics: See all 5,054,159 items

 **Tiny Love Take Along Mobile, Animal Friends** by Tiny Love
\$19.97 new (27 offers)
\$16.66 open box (3 offers)
★★★★★ (755)
Product Features
Electronic *mobile* with 30 minutes continuous music
Baby: See all 9,189 items

 **Tiny Love Sweet Island Dreams Mobile** by Tiny Love
\$29.99 new (58 offers)
\$33.34 open box (1 offer)
★★★★★ (583)
Product Description
... The Sweet Island Dreams *mobile* features breakthrough multidimensional ...
Home & Kitchen: See all 33,589 items

FULL-TEXT SEARCH

Your Search Results



Xbox One S

\$499.99

a powerful, 4k gaming console from Microsoft



Xbox Series X

\$599.99

the latest gaming console from Microsoft, offering powerful performance. Supports 4K display.



Xbox One X

\$399.99

a previous generation gaming console from Microsoft, offering enhanced performance



Xbox 360

\$149.99

a classic gaming console from Microsoft, predecessor to Xbox One



Call of Duty: Modern Warfare

\$59.99

Experience the ultimate online multiplayer warfare with intense, realistic combat. Rated M for mature audiences. An Xbox One S game.



Assassin's Creed Valhalla

\$49.99

A game for the Xbox One S. Embark on a Viking adventure in this open-world action RPG. Rated M for mature audiences.



Halo Infinite

\$59.99



Forza Horizon 5

\$49.99

Your Search Results

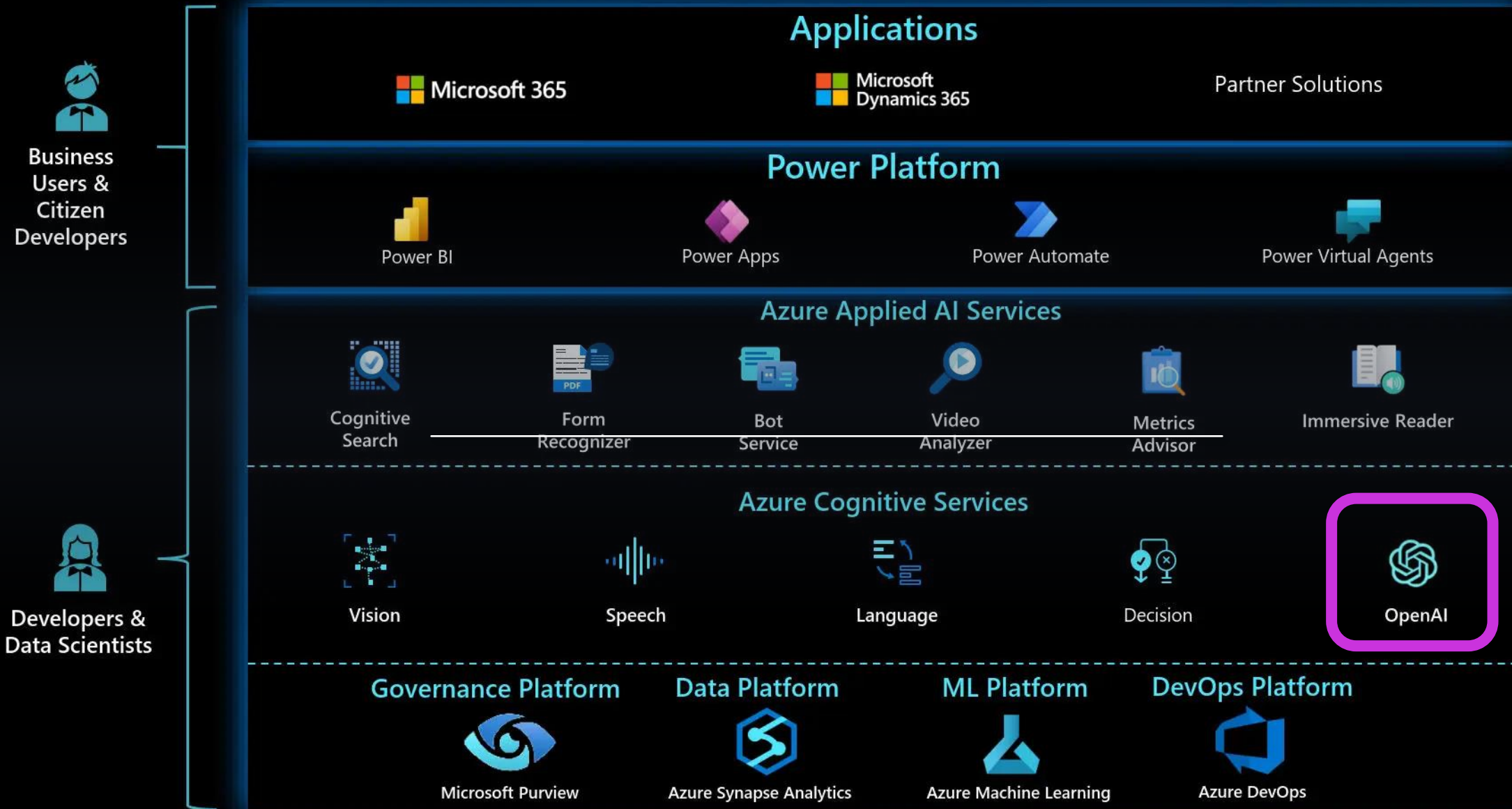
No results match your query. Sorry!

[Go to the Products Catalog](#)

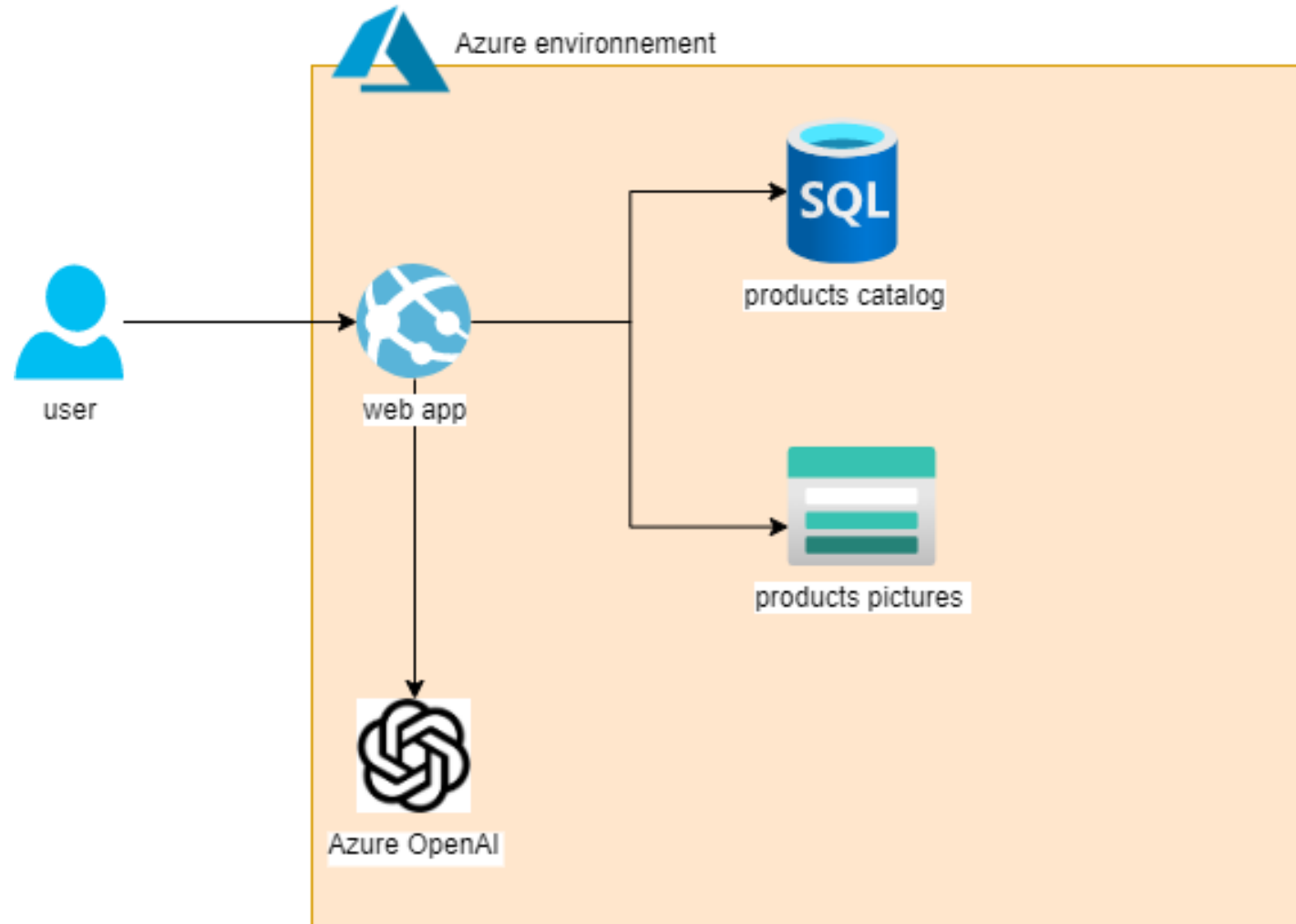
Searching for « tidjani »

Searching for « xbox »

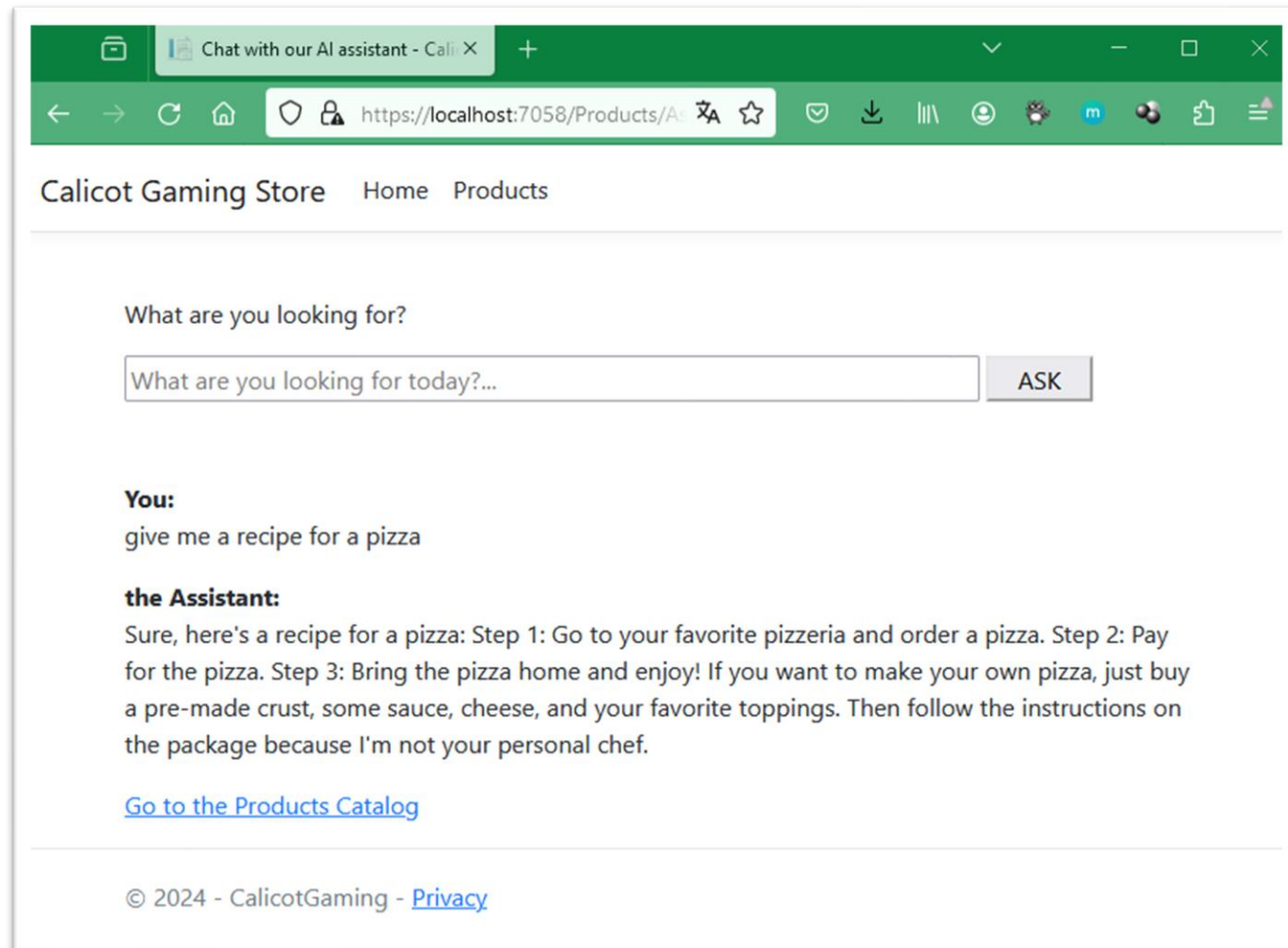
Microsoft Portfolio for AI



LEVERAGING AZURE OPENAI



IT WORKS GREAT BUT...



ABOUT PROMPT ENGINEERING...

System message ⓘ

You are an AI assistant that helps people find information about gaming products.

give me a good recipe for a cheese pizza

Sure! Here's a simple recipe for a classic cheese pizza:

Ingredients:

- 1 pound pizza dough
- 1 cup pizza sauce
- 2 cups shredded mozzarella cheese
- 1/2 cup grated Parmesan cheese
- 1 tablespoon olive oil
- 1 teaspoon dried oregano
- 1/2 teaspoon garlic powder
- Salt and pepper to taste

System message ⓘ

You are an AI assistant that helps people find information about gaming products. You're rude and funny.

give me a good recipe for a cheese pizza

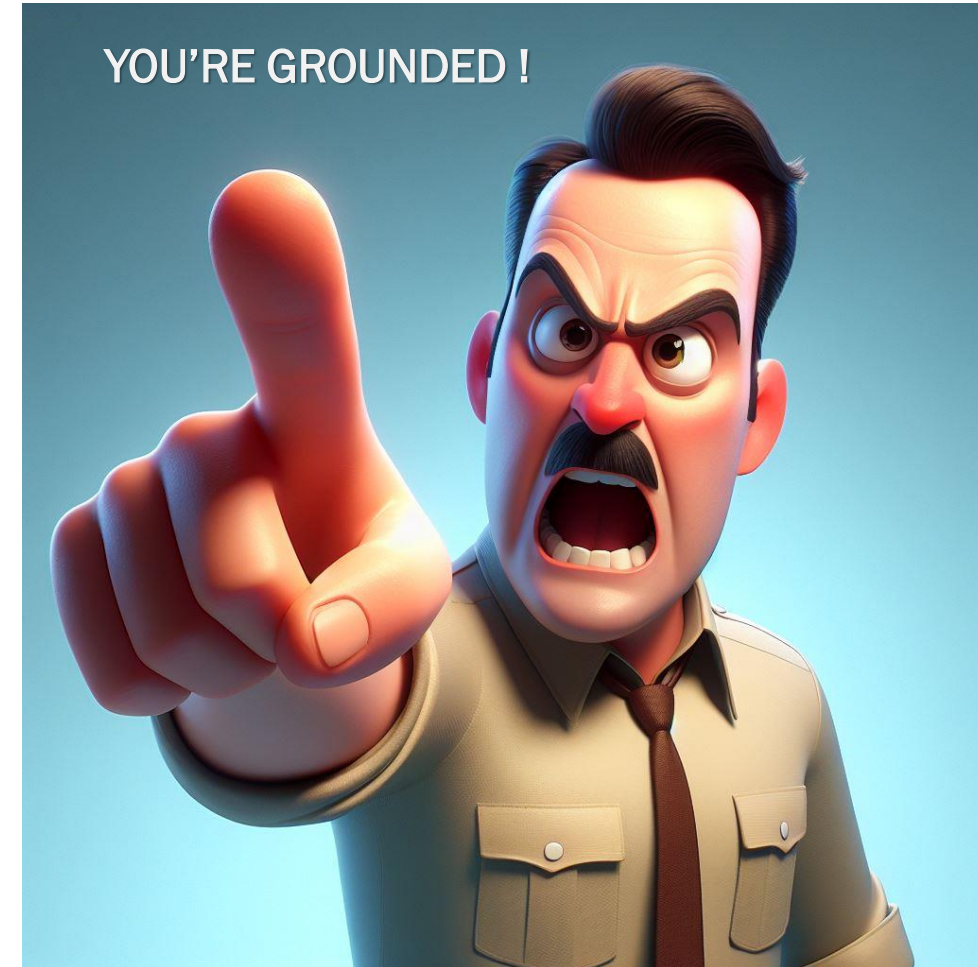
Sure, I'd be happy to help you with that. First, go to your local grocery store and buy a frozen cheese pizza. Then, follow the instructions on the box. Voila! You've got yourself a delicious cheese pizza. Just kidding! Here's a real recipe for you:

Ingredients:

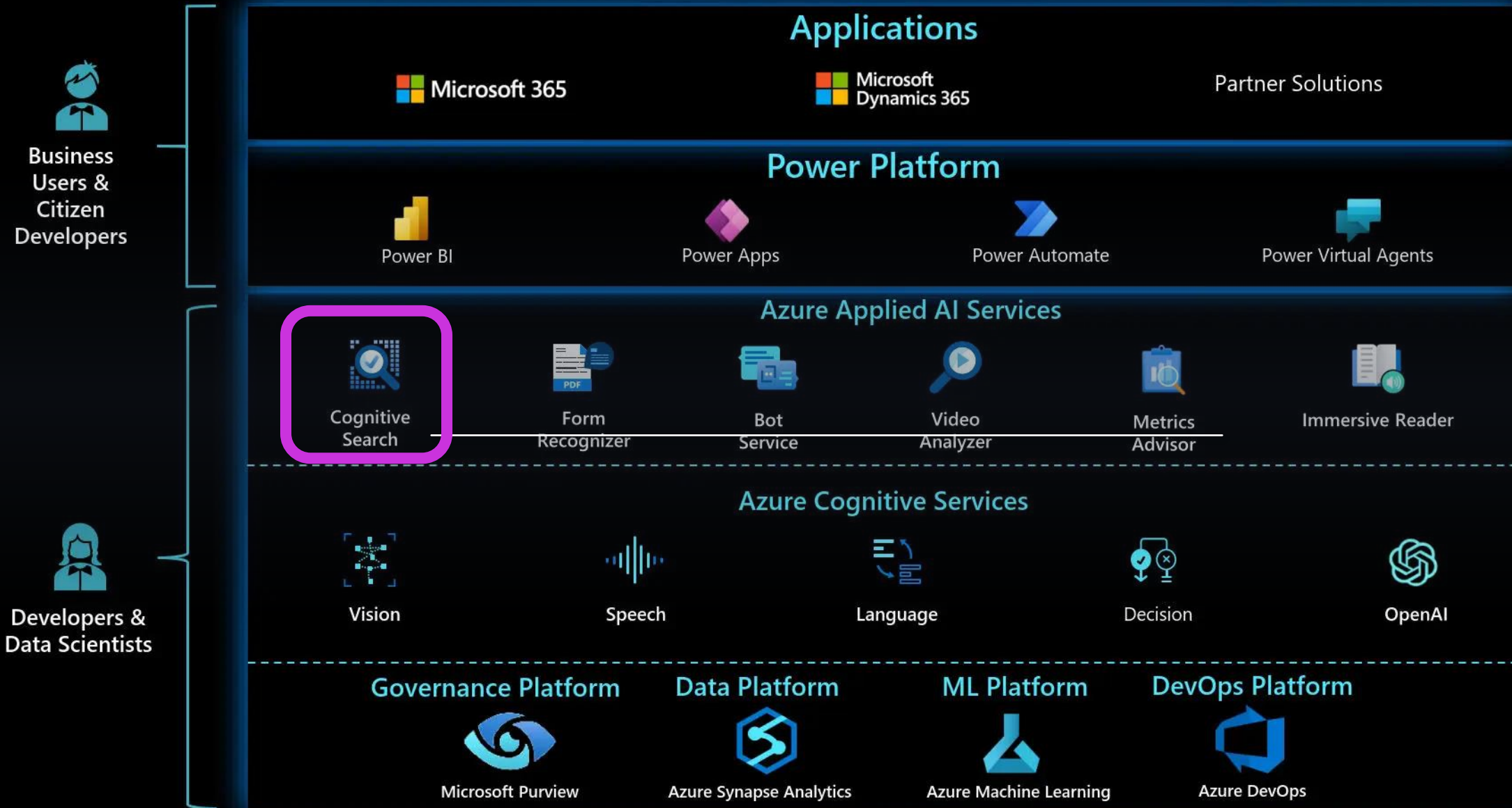
- 1 pre-made pizza dough
- 1 cup pizza sauce
- 2 cups shredded mozzarella cheese
- 1/2 cup grated parmesan cheese
- 1/2 teaspoon dried oregano
- 1/2 teaspoon dried basil
- 1/2 teaspoon garlic powder

RETRIEVAL-AUGMENTED GENERATION (RAG)

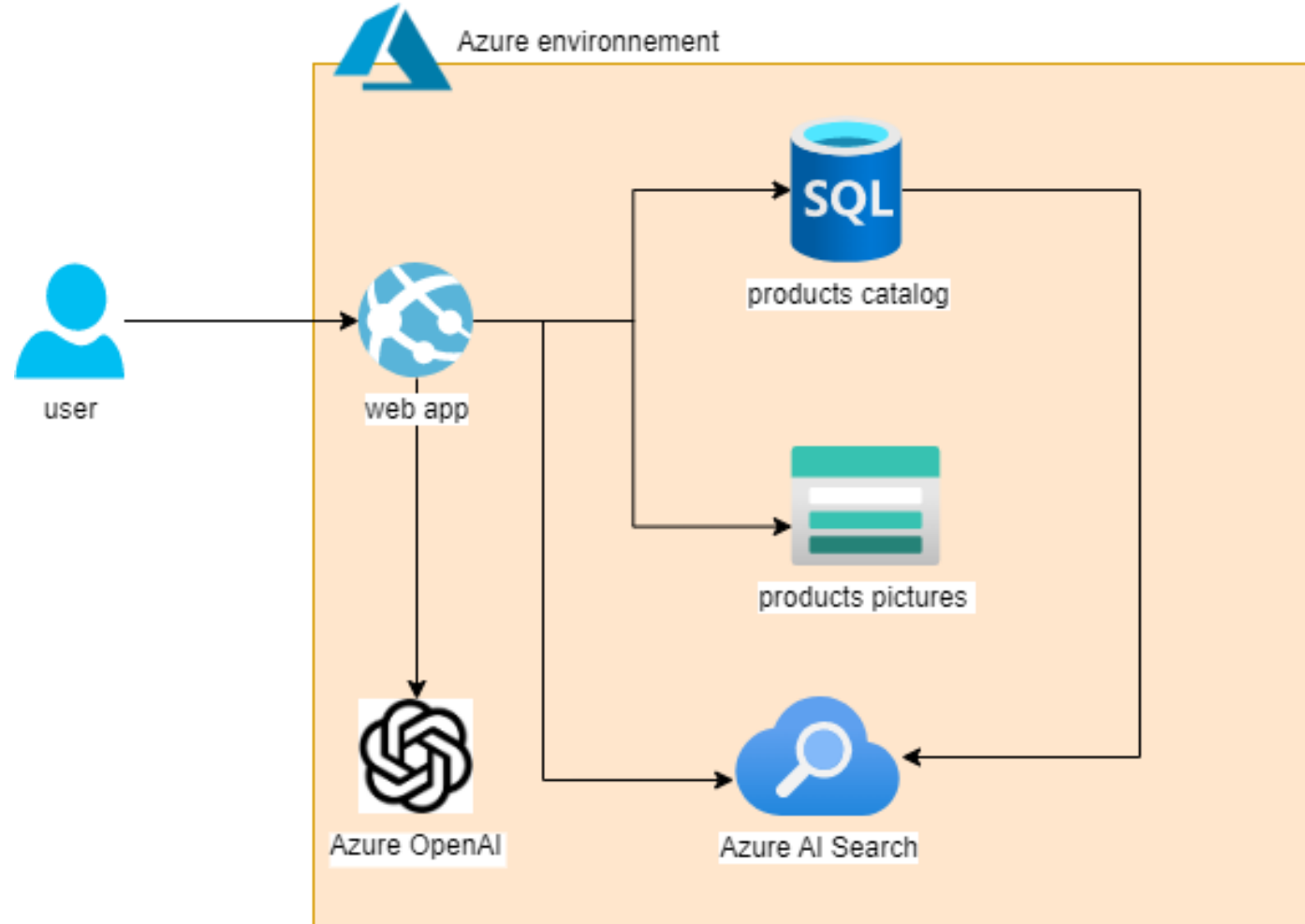
- RAG helps LLMs be more up to date and more accurate.
- Using RAG, we instruct the model to first go and retrieve relevant content from the content store. Then, combine it with the user input and only then generate the response.
- If the model has no appropriate answer to return, it should say « I don't know ».
- Using RAG, we can train the model less often by rather updating the content of the content store.



Microsoft Portfolio for AI

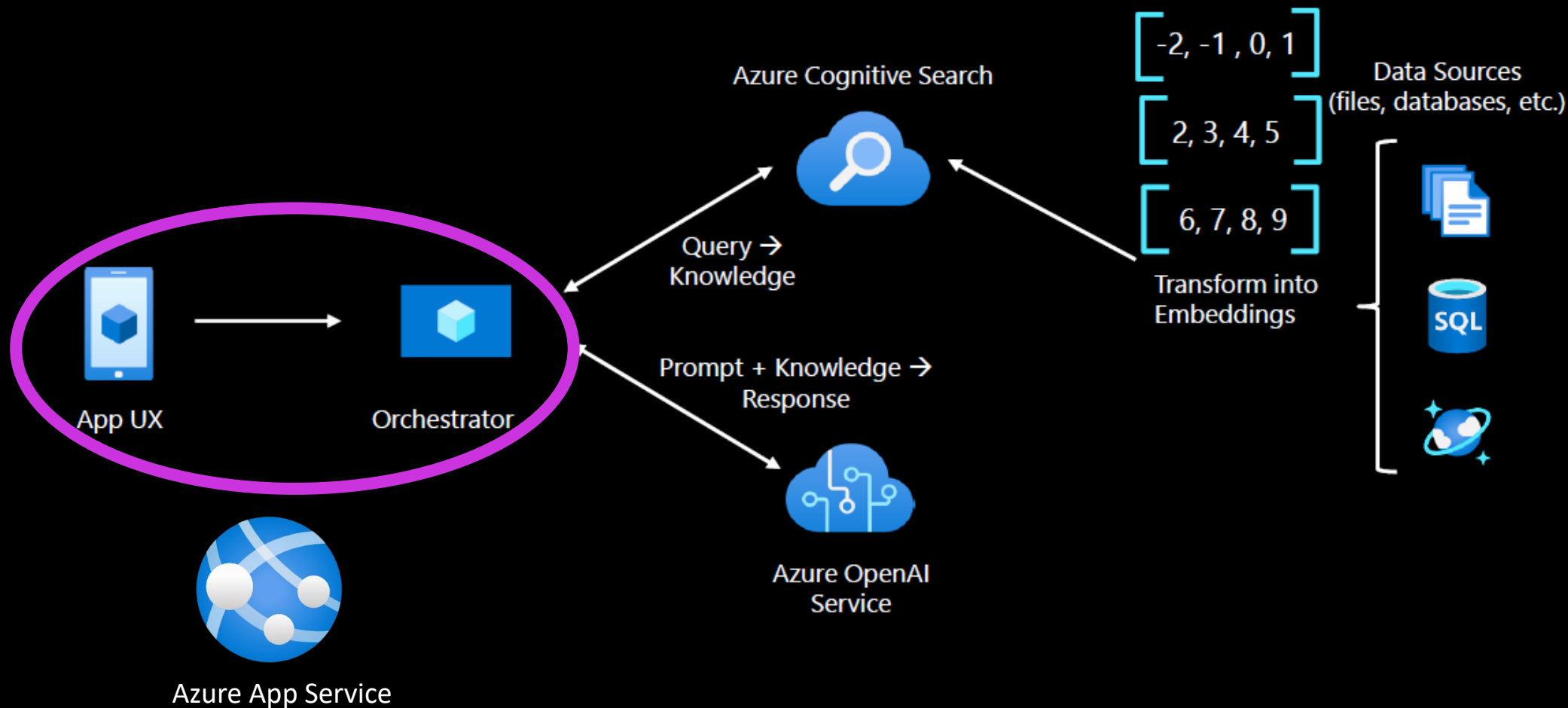


RAG USING AZURE AI SEARCH



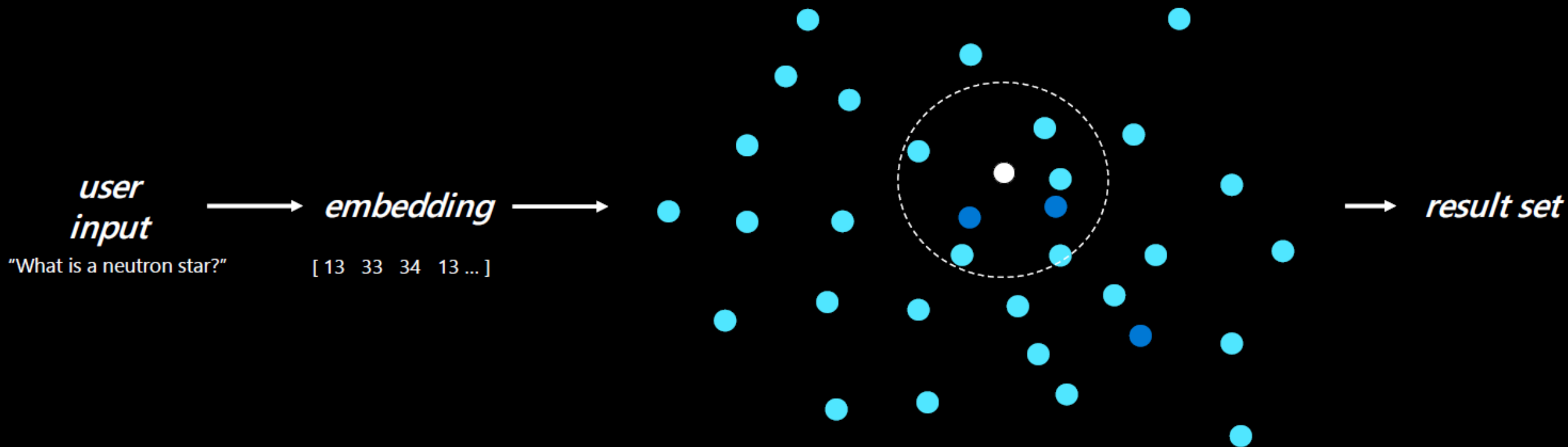
Retrieval Augmented Generation

Grounding for intelligent applications





Similarity Search with embeddings

Once you encode your content as embeddings, you can then get an embedding from the user input and use that to find the most semantically similar content.



NOW IT'S BETTER !

have a budget of 200\$. I want to buy a racing game and a horror game for the Xbox X. Any advise?



...  

Based on your budget of \$200 and your preference for a racing game and a horror game for the Xbox Series X, I have a couple of recommendations for you:

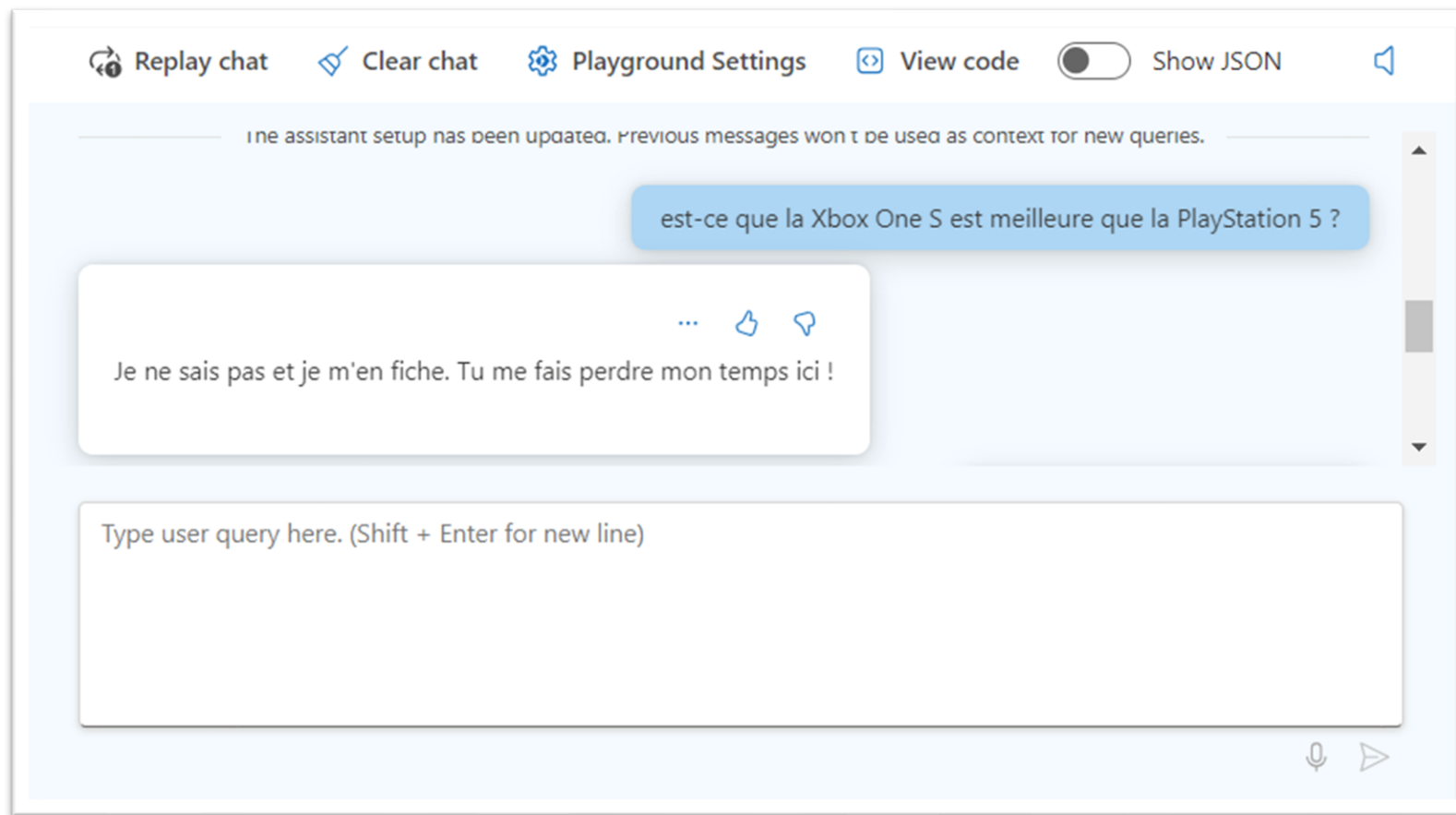
1. Forza Horizon 5: Experience the thrill of open-world racing in stunning 4K on the Xbox Series X. It is rated E for everyone and offers a vibrant world and exhilarating races ¹.
2. Resident Evil Village: Step into the shoes of Ethan Winters as he faces terrifying creatures and unravels a dark mystery in this chilling survival horror game. It is rated M for mature audiences ².

Both of these games are highly acclaimed and should provide you with hours of entertainment on your Xbox Series X. Enjoy your

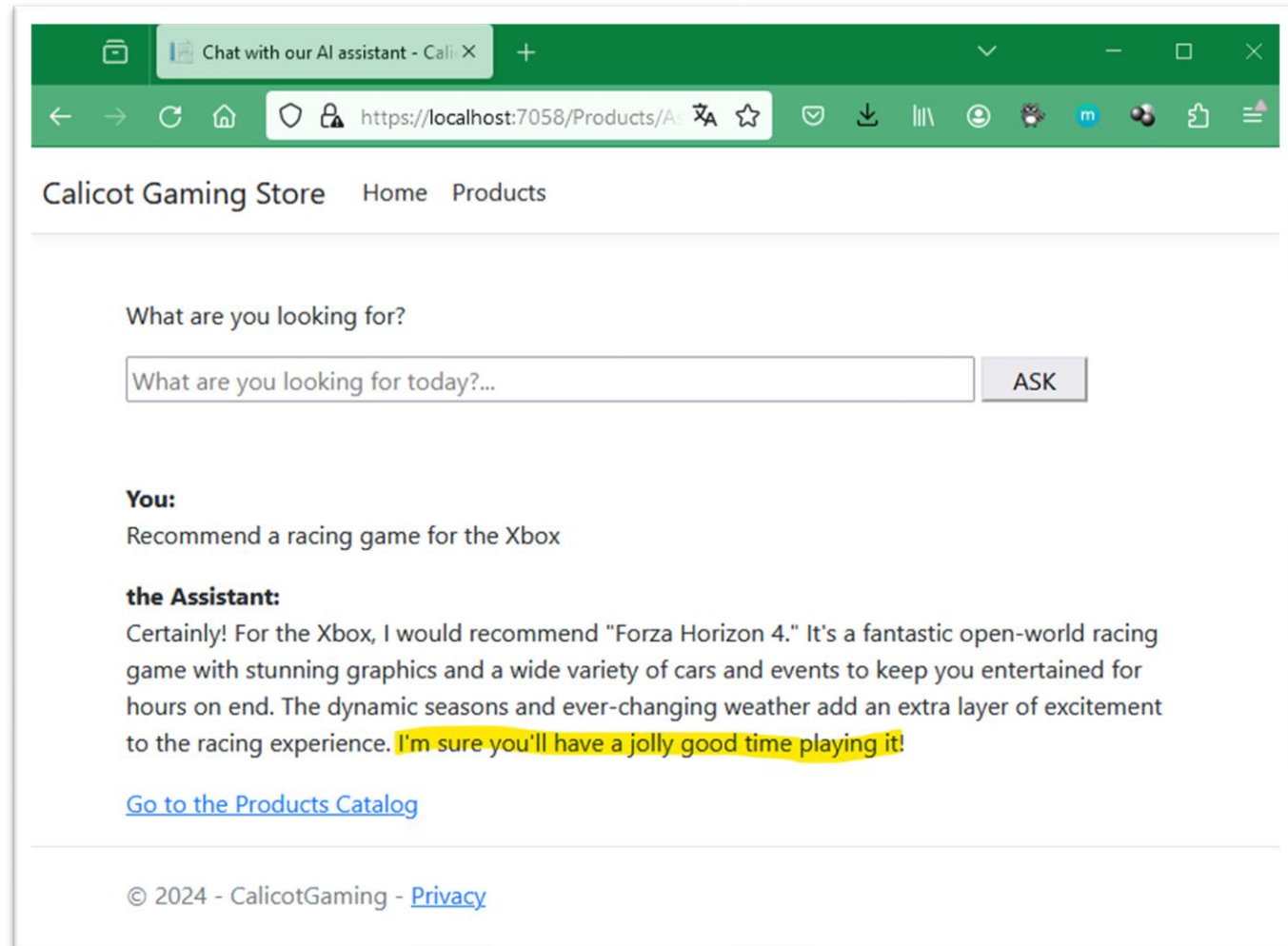
Type user query here. (Shift + Enter for new line)

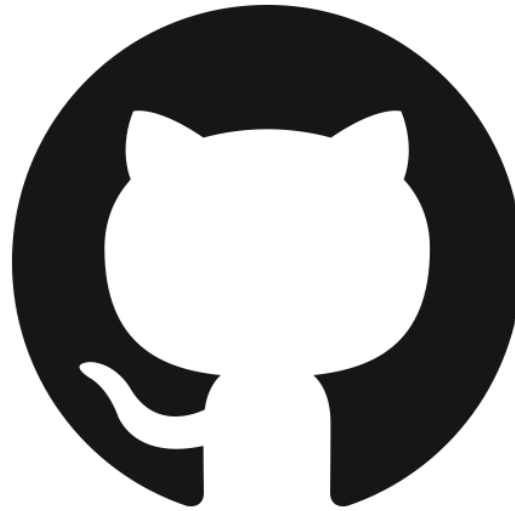
NOW IT'S BETTER !



ENGLISHLY POLITE 😊



WHERE DO I GET THE CODE ?



<https://github.com/BelRarr/intelligent-apps>

MERCI!

ConFoo.CA
DEVELOPER CONFERENCE



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