

# Build Your Own Course Assistant with AI

Hi 

**Luis Quintanilla**  
**Senior Product Manager**



**Kinfey Lo**  
**Senior Cloud Advocate**



# Agenda

- Introduction
- Prerequisites
- AI overview
- Solution overview
- Demo

# Prerequisites

- GitHub Account
- Access to (Azure) OpenAI

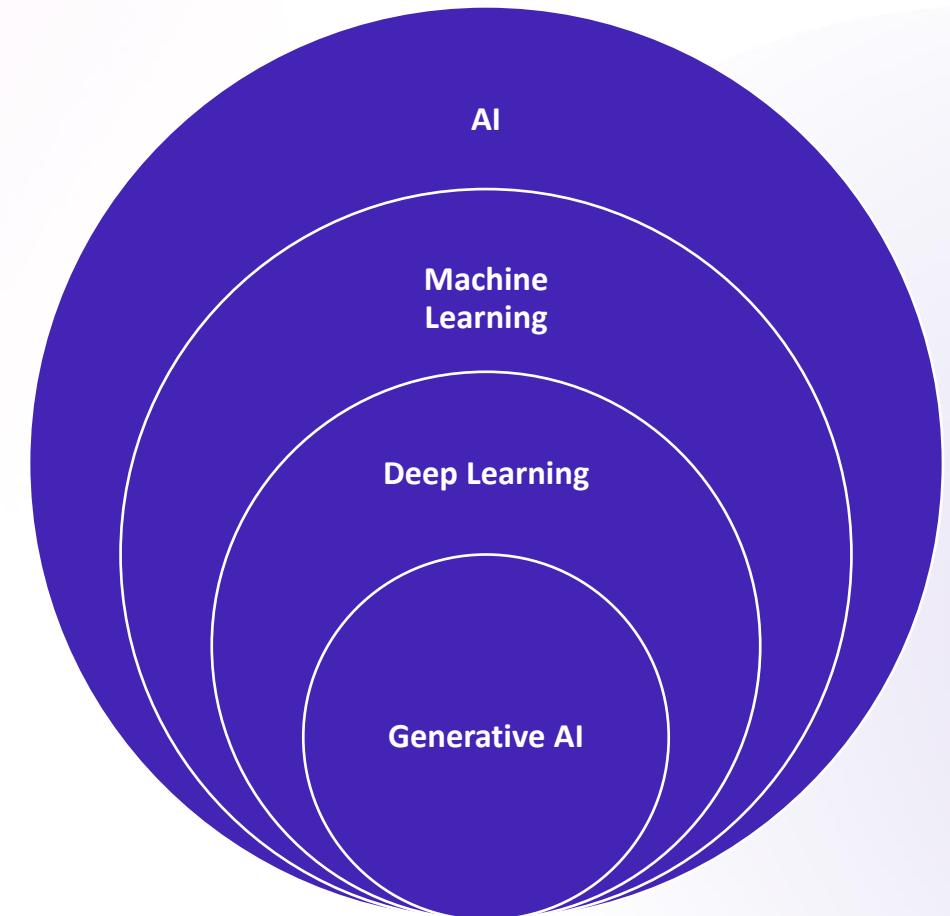
# What is AI?

**AI** – Agents performing actions humans would normally perform.

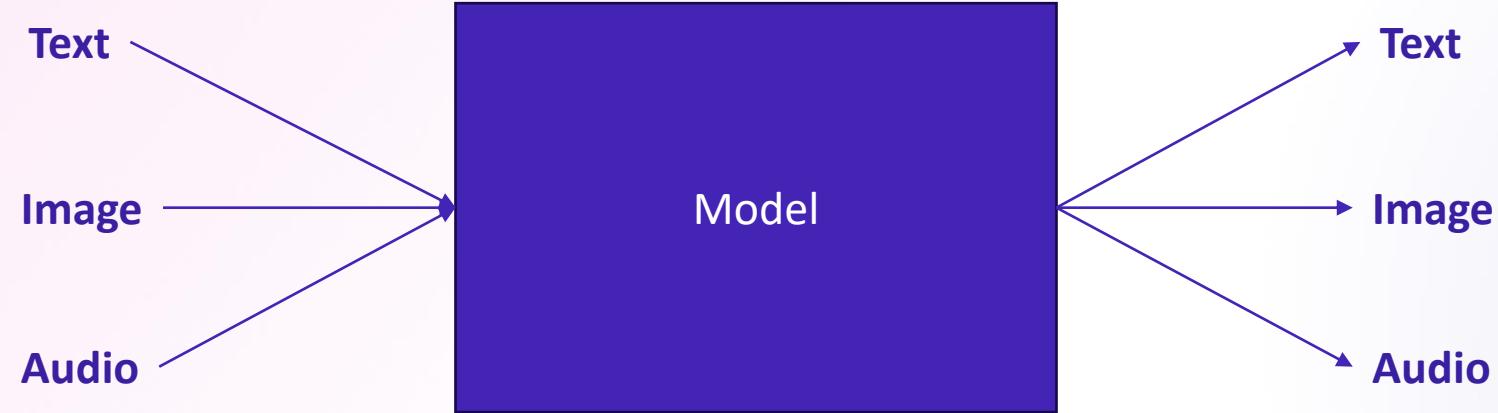
**Machine Learning (ML)** – Applying algorithms to data to extract patterns

**Deep Learning** – Use algorithms known as neural networks.

**Generative AI** - Deep learning models that generate content



# What is a model?

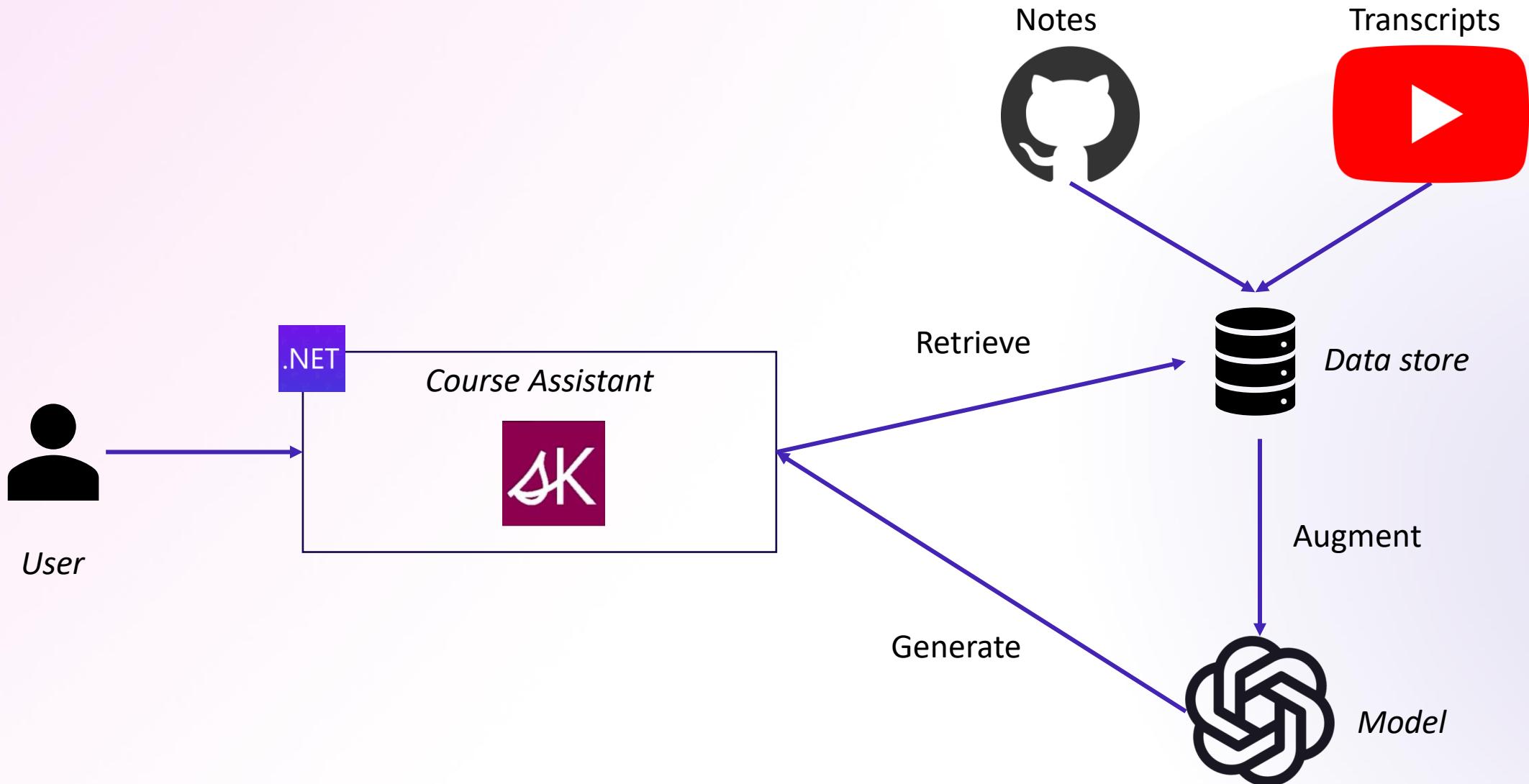


# Models (OpenAI)

Model Name	Input	Output	Capabilities
GPT*	Text	Text	Language modeling, text generation, question answering, summarization, and more
Embedding	Text	Embedding Vector (float array)	Generates embeddings from text
DALL-E	Text	Image	Image generation from text descriptions
Whisper	Audio	Text	Speech recognition, transcription, and translation

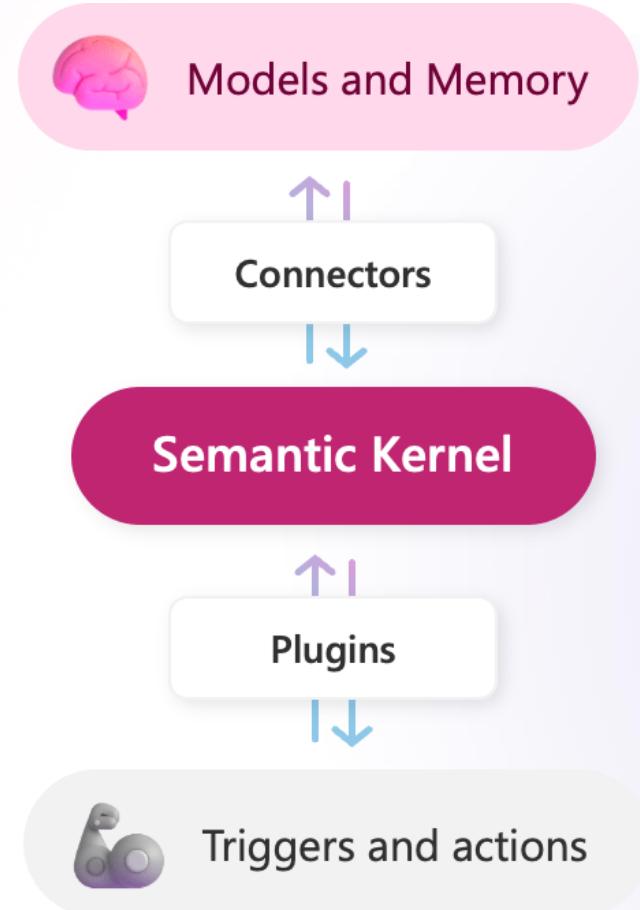
\*GPT4V(ision) enables image inputs and text outputs for visual question answering

# What we'll be building



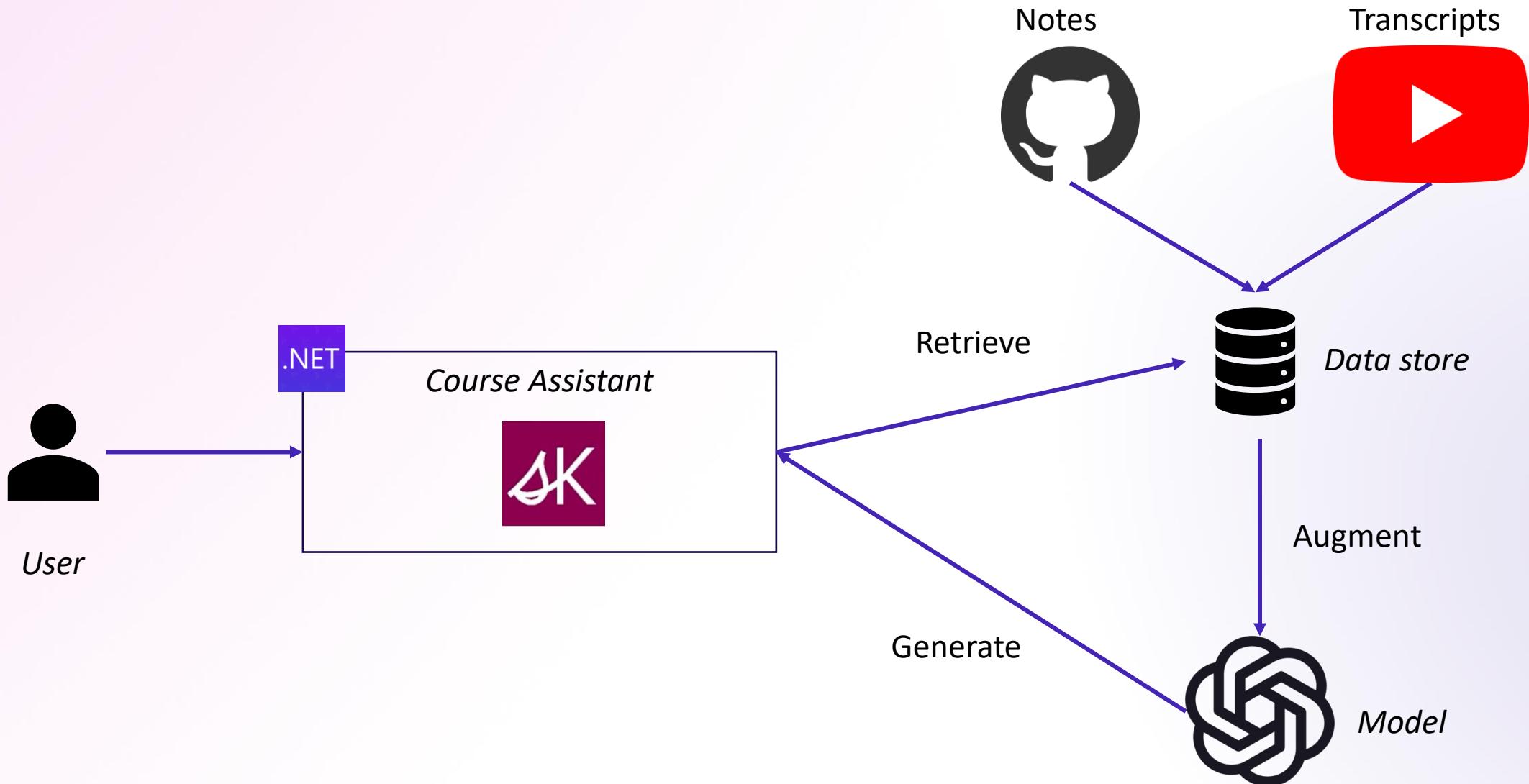
# What is Semantic Kernel?

- Open-Source SDK
- Simplifies the integration of AI components into new and existing applications.



# Demo – Student Assistant

# What we built



# Resources

- [Code Samples](#)
- [Semantic Kernel Docs](#)
- [Azure Open AI Service Docs](#)
- [.NET AI Resources](#)

# AI Sessions at .NET Conf

<https://www.dotnetconf.net/agenda>

Session	Presenters	Time
.NET ❤️ AI	John Maeda, Scott Hanselman	Nov 14 @ 14:15 PST
Build Intelligent Apps with .NET and Azure	Luis Quintanilla, Maria Naggaga	Nov 14 @ 15:00 PST
Building and scaling cloud-native, intelligent applications on Azure and .NET	Scott Hunter	Nov 15 @ 11:30 PST
Generative AI for the .NET Developer	Aaron Powell	Nov 15 @ 18:00 PST
Create an enterprise Copilot extension for Visual Studio Code through Semantic Kernel	Kinfey Lo	Nov 15 @ 19:00 PST
Building generative AI powered bots with Teams Toolkit and AI library for .NET	Ayca Bas, John Miller	Nov 15 @ 21:30 PST

## Student Zone Repository

RELEASED

<https://aka.ms/netconf23/studentrepo>

## Foundational C# Certification

<https://aka.ms/csharp-certification>

## .NET Beginner Videos

<https://aka.ms/dotnetvideos>

## Watch .NET Conf, November 14-16

<https://aka.ms/dotnetconf23-studentzone>