



Semantic Kernel

# Demos & Resources

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# Common features to use AI in business apps

- Data generation
- Categorization, grouping and identifying similarities
- Summarization
- Unstructured data search (often called RAG)
- Auto-complete
- Creating written drafts

# Smart Components Demo

- Smart Paste
- Smart TextArea
- Smart ComboBox
- Local Embeddings

# AdventureWorks Demo

- Use Embeddings to show Similar Products
- Use Embeddings to sort Categories

# RAG using SK, EF and AzureSQL Demo

- Configure Azure SQL for Vector Search
- Configure tables for vector storage
- Perform similarity searching using Entity Framework

**Plus a lab for you to create it yourself:**

<https://github.com/JasonHaley/develop-rag-app-sk-ef-azure-sql-db>

# eShopSupport

- DataGenerator
- Categorization with a local model (using python)
- Summarization
- PDF (unstructured data search)
- RAG
- Creating response drafts
- Evaluator

# Resources

- Semantic Kernel
  - <https://github.com/microsoft/semantic-kernel>
- Smart Components
  - <https://github.com/dotnet/smartcomponents>
- eShopSupport
  - <https://github.com/dotnet/eShopSupport>
- EFCore.SqlServer.VectorSearch
  - <https://github.com/efcore/EFCore.SqlServer.VectorSearch>
- How to add genuinely useful AI to your webapp (not just chatbots)
  - <https://www.youtube.com/watch?v=TSNAvFJoP4M>