



BREAK THE CHAIN: UNLOCK SMARTER QUERIES

Unlock the power of LangChain's advanced tools to seamlessly integrate natural language processing for intelligent database querying across your organization.

HOW IT WORKS



01

User asks a specific question



02

Model uses relevant information and similar previous searches for answer



03

Connects to the database and implements the model's answer



04

Provides an answer to prompt in natural language for all to read

USE CASE

"Give me a list of top 5 Customers based on total invoices."

Output

```
SELECT I.CustomerId, C.FirstName,  
       C.LastName, SUM(I.Total) AS  
       TotalAmount  
FROM   invoice AS I  
JOIN   customer AS C USING  
       (CustomerId)  
GROUP BY 1,2,3  
ORDER BY TotalAmount DESC  
LIMIT 5;
```

CustomerId	FirstName	LastName	Total Amount
6	Helena	Holly	49.62
26	Richard	Cunningham	47.62
57	Luis	Rojas	46.62
46	Hugh	O'Reilly	45.62
45	Ladislav	Kovak	45.62

WHY LANGCHAIN?



Rated E for Everyone:
All Skill Levels are Welcome



Security:
Eliminate feeding information into AI



Custom Workflows:
Build Your Own Process

FREE open-source framework powered by LLMs

Key Components

Chains

Sequential automated tasks

Links

Smaller tasks in each chain

Memory

Maintains context across multiple queries

Tools

External systems or functions called

Agents

Decides on the tool best suited for the request

Prompts

Instructions given by the user for custom queries



READY TO BREAK THE CHAIN?

Group 6

Official Website



Contacts

Anna Niedermeyer (niede098@umn.edu)
Olivia Boe (boe00024@umn.edu)
Dhiraj Patel (pate1525@umn.edu)
Mehulkumar Patel (pate1526@umn.edu)
Anshu Mehta (mehta395@umn.edu)

Our Presentation

