In The Name of Allah

AI Agent: Prof Recommender

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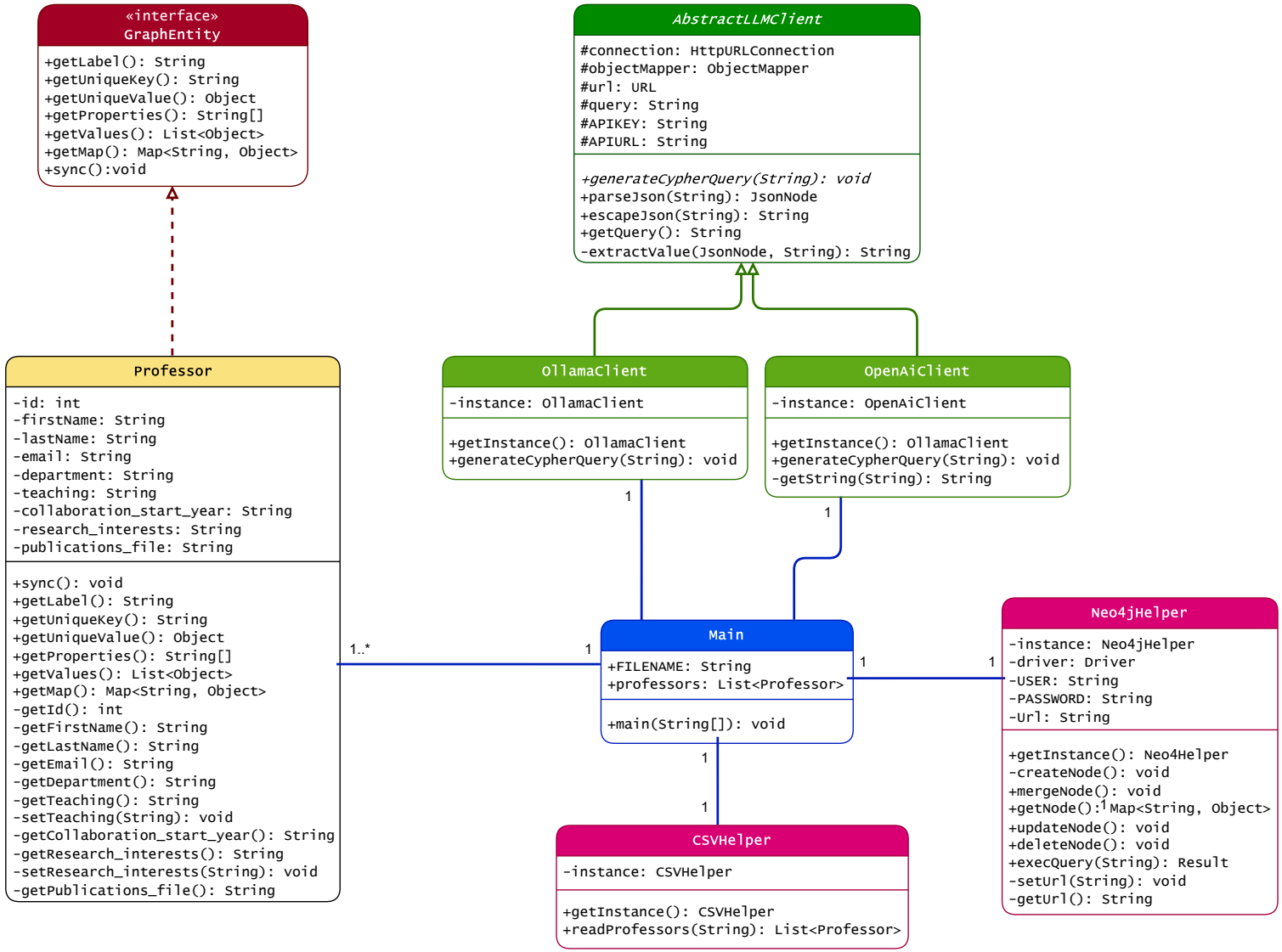
Presentation Overview

UML (Structured) Class Diagram

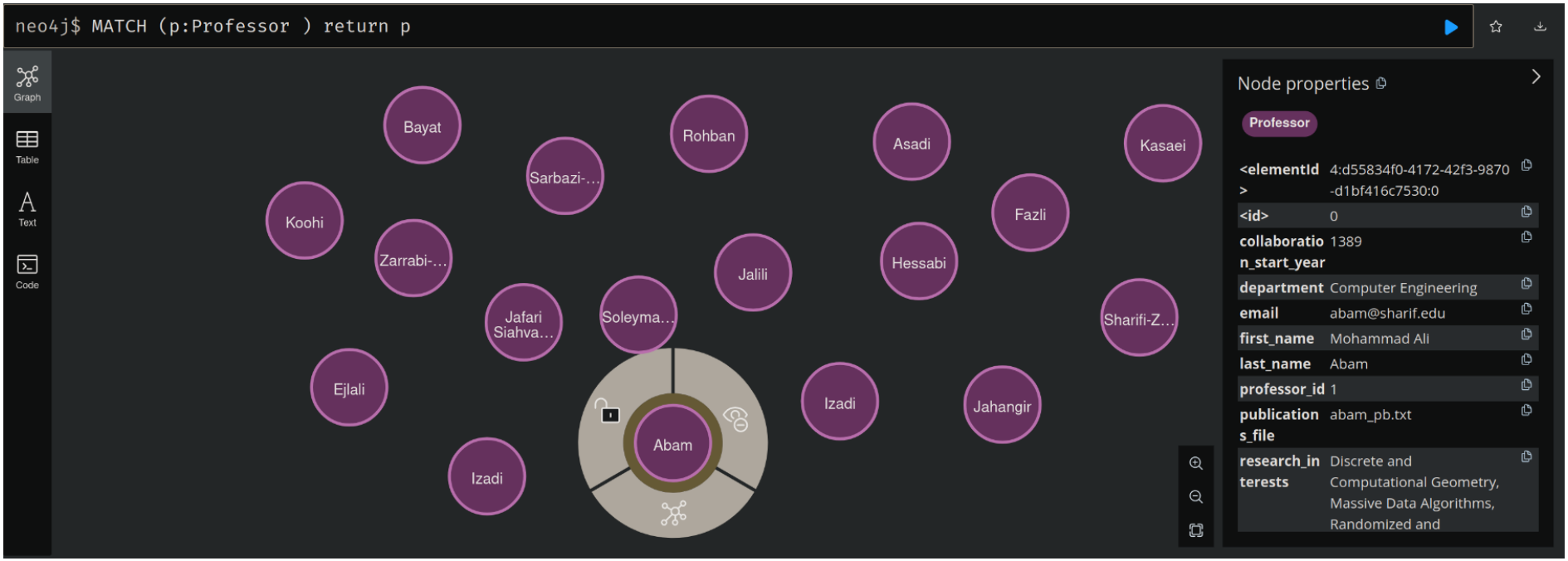


Neo4j as Knowledge Base

Graph Nodes

Neo4j as Knowledge Base

Node Propertites



OpenAI API Query Format

gpt-4

- {
  - "model": "gpt-4",
  - "messages": [
    - {"role": "system", "content": " PROMPT_1 "},
    - {"role": "user", "content": " PROMPT_2 "}
  -],
  - "max_tokens": 200
- }

1. PROMPT_1 = "You are a Cypher query generator. Only provide Cypher queries in a single line, without any line breaks or extra formatting."
2. PROMPT_2 = "i want to take Computer Vision course this term, Which professor you suggest?"

Ollama API Query Format

codellama:7b

- {
  - "model": "codellama",
  - "prompt": " PROMPT_1 ",
  - "stream": "false"
- }

1. PROMPT_1 = "USER_REQUEST='%s' Please create a Cypher query based on USER_REQUEST for a graph in Neo4j where nodes represent Professors."

Explain Graph nodes and their properties for LLMs

1. Graph nodes represent Professors. Each Professor node has the following properties: professor_id (which is unique and should be used to identify the professor), first_name, last_name, email, department, teaching, collaboration_start_year, research_interests, and publications_file. The professor_id should be used as the unique identifier for each node, and the query should create nodes for Professors with the given properties. IMPORTANT: When filtering based on the request, the query should not require an exact match for fields like 'teaching' or 'research_interests', but should instead search for partial matches (e.g., using the CONTAINS operator) for the keyword. Additionally, the results should be sorted by collaboration_start_year in ascending order (i.e., from the smallest number upward)

Send some Prompt

Show The Code