

Replication package for the OAGen experiment

Prompt for the pipeline without RAG:

- Input from user (referred in the prompt as {{topic}}):


```

**API Name**
Customers

**API Identifier**
/customers/v1

**API Description**
Solution that enables customer registration and queries.

**Available Functionalities**

Customer registration: Each client is registered by providing id, complete name,
address (street, number, city, state, and ZIP code), and professional information
(employer, position, income).

Customer query: Returns the data of a specific customer by providing the id number.

**User Journey**
The user can register a new customer and query any existing customer.
      
```
- Prompt:


```

system:

You are an AI assistant that performs API design tasks. Your task is to create an
OpenAPI specification for the API proposed below.

**Requirements**
      
```

 - o The OAS specification must be written in version 3.0.1.
 - o It must include all available endpoints in the API, along with their methods (GET, POST, PUT, DELETE, etc.).
 - o Each endpoint must have a clear and concise description, including the required parameters and usage examples, when applicable.
 - o Include the items related to security requirements correctly. There must be at least one OAuth scope for queries and one OAuth scope for other requests.
 - o All endpoints must be linked to an OAuth scope.
 - o Include the HTTP status codes that the API can return, along with their descriptions. Use codes beyond 200.
 - o Include examples for all requests and all responses.
 - o Use schemas where possible.
 - o If there is rate limit or other access policies, make sure to include them in the specification.
 - o Only one server per environment (development, staging, and production) must be included.
 - o All endpoints must contain a query param, required, called gw-dev-app-key of the type string.

```

user:

Create the OpenAPI Specification as follows: {{topic}}

Carefully review the document created, making sure that it meets the OAS 3.0.1
specification in JSON format, before sharing your response.
      
```

Prompt for the pipeline with RAG:

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**User Journey**
The user can register a new customer and query any existing customer.

**Additional Information**

What are the URLs of the development, staging, and production environment servers?
What are the OAuth scopes associated with each endpoint?

```
- **Prompt (the embedded documents are referred as {{context}}):**

```

system:

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OpenAPI specification for the API proposed below.

**Requirements**

    o The OAS specification must be written in version 3.0.1.
    o It must include all available endpoints in the API, along with their methods
      (GET, POST, PUT, DELETE, etc.).
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      required parameters and usage examples, when applicable.
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      requests.
    o All endpoints must be linked to an OAuth scope.
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      descriptions. Use codes beyond 200.
    o Include examples for all requests and all responses.
    o Use schemas where possible.
    o If there is rate limit or other access policies, make sure to include them
      in the specification.
    o Only one server per environment (development, staging, and production) must
      be included.
    o All endpoints must contain a query param, required, called gw-dev-app-key
      of the type string.

user:

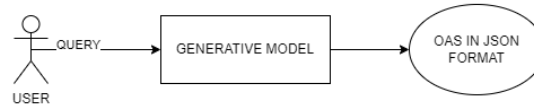
Create the OpenAPI Specification as follows: {{topic}}
{{context}}
Carefully review the document created, making sure that it meets the OAS 3.0.1
specification in JSON format, before sharing your response.

```

Pipelines:

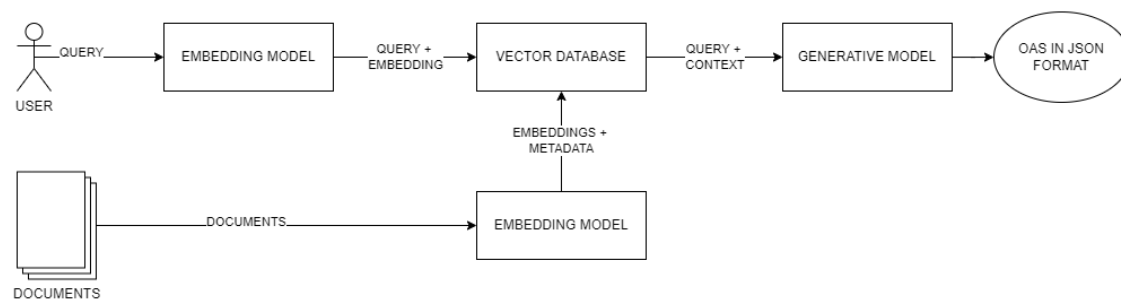
Without RAG

The query is made directly into the generative model.



With RAG

The query is embedded together with the documents to compose a vector database, and then the query with context is made into the generative model.



Please refer to the paper “DevBots can co-design APIs” for additional information.