

Gen AI-based Procurement Q&A App Prompts

In the following GenAI-based Procurement Q&A App use case we are using a Generative AI Multi-Chain Prompting technique to get the results. It consists of 2 prompts:

Important Note:

All examples and data presented in this article are purely fictive and for showcasing purposes only. Any resemblance to real persons, or actual companies is purely coincidental. Dummy users and entities have been created for this demo, and no real data or information about individuals or organizations is being disclosed. We prioritize privacy and ethical considerations in the presentation of information, and any similarities to real-world entities are unintentional.

Prompt 1:

Text to SQL Generation

To transform the user's query in natural language into a syntactically correct SQL Query, we have created a text-to-sql prompt using two combined techniques: Few-shot Prompting and Chain-of-Thought Prompting.

Task

Generate a syntactically correct ORACLE SQL query to answer the following question:

`{Tell me all the orders after 1st of May 2024}`

Database Schema

This query will run on an database whose schema is represented in this string:

Don't use joins for this schema and if all columns are required give the () notation.*

Don't use LIMIT N clause, instead, replace it by FETCH FIRST N ROWS ONLY.

Don't put FETCH FIRST N ROWS ONLY at the middle of the SQL query, instead, put it ONLY at the end of the SQL query.

You must validate and check that the generated SQL query entirely meets syntax from ORACLE SQL

#"ADMIN"."POLINES" ("LINE_ID" NUMBER(15,0), "ORDER_ID" VARCHAR2(15), "PO_CHARGE_ACCOUNT" VARCHAR2(100), "SHIP_TO_LOC_NAME" VARCHAR2(100), "SHIP_TO_ORG_NAME" VARCHAR2(100), "QUANTITY" FLOAT, "UOM" VARCHAR2(5), "PRICE" FLOAT, "CURRENCY" VARCHAR2(5), "ITEM_CATEGORY" VARCHAR2(50), "ITEM_DESCRIPTION" VARCHAR2(100))

#"ADMIN"."PURCHASEORDERS" ("ORDER_ID" VARCHAR2(15), "TOTAL_TAX" FLOAT, "ORDERED_AMOUNT" FLOAT, "ORDER_BUYER_NAME" VARCHAR2(120), "ORDER_SUPPLIER_NAME" VARCHAR2(120), "TOTAL_ORDERED" FLOAT, "ORDER_BILL_BSNS_UNT" VARCHAR2(40), "ORDER_PROC_BSNS_UNT" VARCHAR2(40), "ORDER_CREATION_DATE" TIMESTAMP(6), "ORDER_STATUS" VARCHAR2(40), "ORDER_REQS_BSNS_UNT" VARCHAR2(40))

*# An example of the ORACLE SQL would be {SELECT * FROM orders WHERE UPPER(ORDER_SUPPLIER_NAME) = UPPER('dell')}*
The SQL query MUST always be in Upper Case. You must always use the "WHERE" clause with the "UPPER" clause for the column name and the column value, for example: {WHERE UPPER("ORDER_STATUS") = UPPER("canceled")}

ORACLE SQL

Given the database schema, here is the ORACLE SQL query that answers ` {Tell me all the orders after 1st of May 2024} ` : <sql query>;

Prompt 2: SQL Response Synthesized Answer

To provide a synthesized answer in natural language based on the SQL Response, we have created a prompt in a Zero-shot technique, where we explicitly mention the output we need.

Task

The original question is given below. The answer is given below.
Given only the answer, please synthesize a response to the original question.
Don't include any extra words or reasoning, instead, only include the synthesized answer.

Don't synthesize the answer in JSON Format.

Don't synthesize the answer based on your own knowledge.
Don't add any extra words, instead, only synthesize the response in natural language based on the answer.

Also, if the question asks for more than one result and the answer has only one result, then synthesize the response only based on that result. Otherwise, if the answer has more than one result, then synthesize the response providing the list of all the results in bullet format.

Original question: {Tell me all the orders after 1st of May 2024}

Answer: {{"ORDER_ID": "US164859","ORDER_STATUS":

"OPEN","ORDER_CREATION_DATE": "2024-05-

02T10:38:58.000+00:00","ORDER_PROC_BSNS_UNT": "US1 Business

Unit","ORDER_BILL_BSNS_UNT": "US1 Business Unit","ORDER_REQS_BSNS_UNT": "US1

Business Unit","ORDER_SUPPLIER_NAME": "EIP Inc","ORDER_BUYER_NAME": "Brown,

Casey","ORDERED_AMOUNT": "491.88","TOTAL_TAX": "46.73","TOTAL_ORDERED":

"538.61"},{"ORDER_ID": "US164860","ORDER_STATUS":

"OPEN","ORDER_CREATION_DATE": "2024-05-

02T11:21:02.000+00:00","ORDER_PROC_BSNS_UNT": "US1 Business

Unit","ORDER_BILL_BSNS_UNT": "US1 Business Unit","ORDER_REQS_BSNS_UNT": "US1

Business Unit","ORDER_SUPPLIER_NAME": "EIP Inc","ORDER_BUYER_NAME": "Brown,

```
Casey","ORDERED_AMOUNT": "1487.88","TOTAL_TAX": "141.35","TOTAL_ORDERED":  
"1629.23"]}]
```

```
}
```

Result Format

*# Please respond only in format: Response: <synthesized answer> in natural language,
without any extra explanation or question or sentence*