

Mult-LLM prompting

Prompt:

You are a database designer. Please create an Entity-Relationship (ER) diagram for the operations of ε

Send

llama3

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erDiagram
STUDENT ||--o{ ENROLL : enrolls
PROFESSOR ||--o{ CLASSROOM : teaches
PROFESSOR ||--o{ DEPARTMENT : works_in
DEPARTMENT ||--o{ COURSE : offers
SCHOOL ||--o{ DEPARTMENT : contains
COURSE ||--o{ CLASSROOM : scheduled_in
ROOM ||--o{ CLASSROOM : hosts
BUILDING ||--o{ ROOM : has
STUDENT ||--o{ MEMBERSHIP : joins
GREEK_LIFE ||--o{ MEMBERSHIP : includes
STUDENT ||--o{ ATTENDS : attends
CAMPUS_EVENTS ||--o{ ATTENDS : involves
STUDENT ||--o{ HOUSING_ASSIGNMENT : lives_in
RESIDENTIAL_COLLEGE ||--o{ HOUSING_ASSIGNMENT : lives_in
STUDENT ||--o{ SERVICE_USAGE : uses
TROJAN_SERVICES ||--o{ SERVICE_USAGE : provides
STUDENT ||--o{ LIBRARY_ACCESS : accesses
DOHENY_LIBRARY ||--o{ LIBRARY_ACCESS : provides
STUDENT ||--o{ PARTICIPATES : participates
TROJANATHLETICS ||--o{ PARTICIPATES : participates

class STUDENT {
    STU_NUM (int, PK)
    DEPT_CODE (string, FK)
    STU_LNAME (string)
    STU_FNAME (string)
}

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gemma 2.2b

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erDiagram
STUDENT --(ENROLL)--> CLASSROOM
STUDENT --(PROFESSOR)--> PROFESSOR
STUDENT --(MEMBER)--> GREEK_LIFE
STUDENT --(ATTENDS)--> CAMPUS_EVENTS
STUDENT --(HOUSING_ASSIGNMENT)-->
STUDENT --(SERVICE_USAGE)--> TROJAN_SERVICES
STUDENT --(LIBRARY_ACCESS) --> DOHENY_LIBRARY
STUDENT --(PARTCIPATES)--> TROJANATHLETICS

PROFESSOR --(WORKS_IN)--> DEPARTMENT
DEPARTMENT --(OFFERS)--> COURSE
SCHOOL --(CONTAINS)--> DEPARTMENT
COURSE --(SCHEDULED_IN)--> CLASSROOM
CLASSROOM --(HOSTS)--> ROOM
BUILDING --(HAS)--> ROOM

ENROLL --(STUDENT_NUMBER)--> STUDENT
ATTENDS --(STU_NUMBER) --> ATTENDS
SERVICE_USAGE --(STU_NUMBER) --> SERVICE_USAGE
LIBRARY_ACCESS --(STU_NUMBER) --> LIBRARY_ACCESS

GREEK_LIFE --(MEMBERSHIP)--> MEMBERSHIP
CAMPUS_EVENTS --(ATTENDS)--> ATTENDS
RESIDENTIAL_COLLEGE --(HOUSING_ASSIGNMENT)--> HOUSING_ASSIGNMENT

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STU_INITIAL (string)
STU_EMAIL (string)
PROF_NUM (int, FK)
TROJAN_ID (int)
USC_EMAIL (string)

class PROFESSOR {
    PROF_NUM (int, PK)
    DEPT_CODE (string, FK)
    PROF_SPECIALTY (string)
    PROF_RANK (string)
    PROF_LNAME (string)
    PROF_FNAME (string)
    PROF_INITIAL (string)
    PROF_EMAIL (string)

class DEPARTMENT {
    DEPT_CODE (string, PK)
    DEPT_NAME (string)
    SCHOOL_CODE (string, FK)
    PROF_NUM (int, FK)

class SCHOOL {
    SCHOOL_CODE (string, PK)
    SCHOOL_NAME (string)

class COURSE {
    CRS_CODE (string, PK)
    DEPT_CODE (string, FK)
    CRS_TITLE (string)
    CRS_DESCRIPTION (string)
    CRS_CREDIT (int)

class CLASSROOM {
    CLASS_CODE (string, PK)
    CLASS_SECTION (string)
    CLASS_TIME (date)
    CRS_CODE (string, FK)
    PROF_NUM (int, FK)
    ROOM_CODE (string, FK)

class ROOM {
```

```
TROJAN_SERVICES --(SERVICE_USAGE)
DOHENY_LIBRARY --(LIBRARY_ACCESS)

Membership (STU_NUM, GREEK_ID, JOI
Attends (STU_NUM, EVENT_ID)
Housing_Assignment (STU_NUM, HOUSI
Service_Usage (STU_NUM, SERVICE_ID
Library_Access (STU_NUM, LIBRARY_I
Participation (STU_NUM, SPORT_ID,
```

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ROOM_CODE (string, PK)
ROOM_TYPE (string)
BLDG_CODE (string, FK)

class BUILDING {
    BLDG_CODE (string, PK)
    BLDG_NAME (string)
    BLDG_LOCATION (string)

class DOHENY_LIBRARY {
    LIBRARY_ID (int, PK)
    LIBRARY_NAME (string)
    HOURS (date)
    SPECIAL_COLLECTIONS (string)

class TROJAN_ATHLETICS {
    SPORT_ID (int, PK)
    SPORT_NAME (string)
    SEASON (date)
    COACH_ID (int, FK)

class GREEK_LIFE {
    GREEK_ID (int, PK)
    GREEK_NAME (string)
    CHAPTER_TYPE (string)
    MEMBER_COUNT (int)

class CAMPUS_EVENTS {
    EVENT_ID (int, PK)
    EVENT_NAME (string)
    EVENT_DATE (date)
    VENUE (string)
    EVENT_TYPE (string)

class RESIDENTIAL_COLLEGE {
    HOUSING_ID (int, PK)
    BUILDING_NAME (string)
    ROOM_TYPE (string)
    CAPACITY (int)

class TROJAN_SERVICES {
    SERVICE_ID (int, PK)
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```
SERVICE_NAME (string)
LOCATION (string)
HOURS (date)

class MEMBERSHIP {
    STU_NUM (int, FK)
    GREEK_ID (int, FK)
    JOIN_DATE (date, PK)

class ATTENDS {
    STU_NUM (int, FK)
    EVENT_ID (int, FK)
    ATTEND_DATE (date, PK)

class HOUSING_ASSIGNMENT {
    STU_NUM (int, FK)
    HOUSING_ID (int, FK)
    MOVE_IN (date)
    MOVE_OUT (date, PK)

class SERVICE_USAGE {
    STU_NUM (int, FK)
    SERVICE_ID (int, FK)
    USE_DATE (date, PK)

class LIBRARY_ACCESS {
    STU_NUM (int, FK)
    LIBRARY_ID (int, FK)
    ACCESS_DATE (date, PK)

class PARTICIPATES {
    STU_NUM (int, FK)
    SPORT_ID (int, FK)
    ROLE (string, PK)
```

Exercise for later – install two more models from <https://ollama.com/library> [including if you like, <https://ollama.com/library/llama2-chinese>], add two more columns above, put in code to send your prompt to FOUR LLMs and display their responses.

