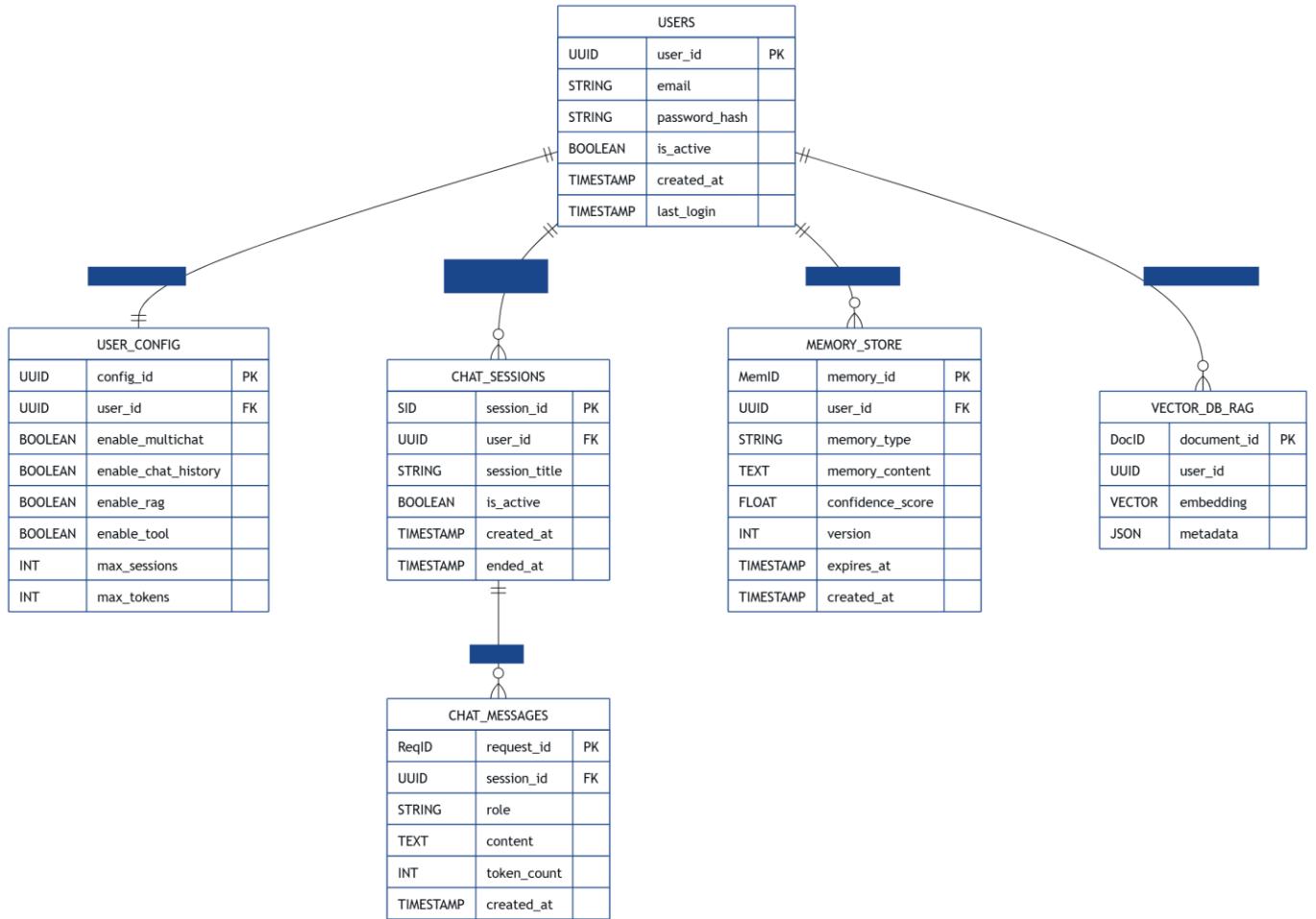


# DB Design



## 1. USERS — “User = kaun hai”

### Purpose

Identifies who the user is and handles authentication & status.

Field	Meaning	Why needed
user_id (PK)	Unique user identifier	Used everywhere as FK
email	User's login email	Authentication + uniqueness

password_hash	Encrypted password	Security (never store plain text)
is_active	User enabled / disabled	Block access without deleting
created_at	Account creation time	Auditing, analytics
last_login	Last login timestamp	Security, activity tracking

 **Correct & complete**

## 2. USER\_CONFIG — “User config = kya allowed hai”

### Purpose

Controls **chatbot behavior per user** (feature flags).

Field	Meaning	Why needed
config_id (PK)	Config record ID	DB identity
user_id (FK)	Linked user	1-1 relation
enable_multichat	Multiple chat sessions allowed?	Enable/disable parallel chats
enable_chat_history	Store & retrieve messages?	Privacy / cost control
enable_rag	RAG access allowed?	Knowledge control
enable_tool	Is Tools allowed?	If tools accessible ,then Agent can call tools.
max_sessions	Max active sessions	Resource limits
max_tokens	Token budget per user	Cost & abuse prevention

### Suggestion

add:  
**preferred\_language**  
**timezone**

## 3. CHAT\_SESSIONS — “*kis conversation me*”

### Purpose

Represents **one conversation thread**.

Field	Meaning	Why needed
session_id (PK)	Chat session ID	Unique conversation
user_id (FK)	Owner of session	User mapping
session_title	Chat name	UI friendliness
is_active	Session open/closed	Session lifecycle
created_at	Start time	Ordering
ended_at	End time	Cleanup / analytics

### Suggestion

add:  
last\_message\_at

## 4. CHAT\_MESSAGES — “*kya bola*”

### Purpose

Stores **actual conversation messages**.

Field	Meaning	Why needed
message_id (PK)	Unique message	Reference

session_id (FK)	Chat session	Group messages
role	user / assistant / system	Conversation role
content	Message text	Actual chat
token_count	Tokens used	Cost & limits
created_at	Message time	Ordering

### 💡 Suggestion

add:

```
message_type (text, error, notice)
```

## 5. MEMORY\_STORE — “*kya yaad rakha*”

### Purpose

Stores **long-term intelligent memory**, not chat logs.

Field	Meaning	Why needed
memory_id (PK)	Memory ID	Unique memory
user_id (FK)	Memory owner	User-specific
memory_type	preference / fact / habit	Different reasoning weight
memory_content	Memory text	What to remember
confidence_score	Trust level (0–1)	Avoid wrong assumptions
Is_active	Memory update	Fetch only if is_active=true
expires_at	When to forget	Avoid stale memory
created_at	Created time	Timeline

### Suggestion

add:

```
source (user, inferred, system)
```

## 6. VECTOR\_DB — “*kya knowledge hai*”

### Purpose

Stores **RAG knowledge embeddings**.

Field	Meaning	Why needed
document_id (PK)	Document ID	Identify chunk
user_id	Owner	User-scoped RAG
embedding	Vector representation	Semantic search
metadata	Source info	Context & filtering

### Suggestion

metadata should include:

source  
chunk\_index  
document\_title

## RELATIONSHIP EXPLANATION (Plain Language)

User → Config	= kya allowed hai
User → Sessions	= kis conversation me
Session → Messages	= kya bola
User → Memory	= kya yaad rakha
User → Vector DB	= kya knowledge hai

# IMPORTANT FIELDS YOU MAY ADD (OPTIONAL BUT RECOMMENDED)

## 1. Global Audit / Control

`updated_at`  
`deleted_at` (soft delete)

## 2. Cost & Observability

`total_tokens_used`

## 3. multi-Tenant (future)

`tenant_id`

This schema cleanly separates: identity, permissions, conversation, memory, and knowledge — exactly what a real Digital Human needs.

