Tabel User (Ada tambahan Role Admin)

Nama	Tipe	Keterangan
user_id	int	Primary key, auto increment
email	string	email address, unique
password	string	Hashed password
role	enum	"BUYER", "SELLER", "ADMIN"
name	string	Full name pengguna
address	string	Alamat Pengguna
balance	int	Default 0 (hanya berguna untuk role BUYER)
created_at	datetime	Registration timestamp
updated_at	datetime	Last Update timestamp

Tabel Auctions

Nama	Tipe	Keterangan
auction_id	int	Primary key, auto increment
product_id	int	Foreign key to Product
starting_price	int	Harga awal lelang
current_price	int	Harga bid tertinggi saat ini (default = starting_price)
min_increment	int	Minimum kenaikan bid
quantity	int	Jumlah item yang dilelang (dari stock product)

start_time	datetime	Waktu mulai auction
end_time	datetime	Waktu selesai auction, nullable, diisi ketika *auction* sudah berakhir.
status	enum	"scheduled", "active", "ended", "cancelled"
winner_id	int	Foreign key to User (buyer), nullable
created_at	datetime	Auction creation timestamp

Tabel Auction_Bids

Nama	Tipe	Keterangan
bid_id	int	Primary key, auto increment
auction_id	int	Foreign key to Auctions
bidder_id	int	Foreign key to User (buyer)
bid_amount	int	Jumlah bid
bid_time	datetime	Waktu bid dibuat (default now)

Tabel Chat_Room

Nama	Tipe	Keterangan
store_id	int	Foreign key to Store, PK
buyer_id	int	Foreign key to User (buyer), PK
last_message_at	datetime	Timestamp pesan terakhir, nullable
created_at	datetime	Room creation timestamp (default now)

updated_at	datetime	Last update timestamp (default now)

Tabel Chat_Messages

Nama	Tipe	Keterangan
message_id	int	Primary key, auto increment
store_id	int	Foreign key ke Chat_Rooms (bagian dari composite key)
buyer_id	int	Foreign key ke Chat_Rooms (bagian dari composite key)
sender_id	int	Foreign key to User
message_type	enum	"text", "image", "item_preview"
content	text	Message content (text atau path untuk image)
product_id	int	Foreign key to Product (jika type = item_preview), nullable
is_read	boolean	Default false
created_at	datetime	Message timestamp (default now)

Tabel Push_Subscriptions

Nama	Tipe	Keterangan
subscription_id	int	Primary key, auto increment

user_id	int	Foreign key to User
endpoint	text	Push service endpoint URL
p256dh_key	string	Public key untuk encryption
auth_key	string	Auth secret untuk encryption
created_at	datetime	Subscription timestamp (default now)

Tabel Push_Preferences

Nama	Tipe	Keterangan
user_id	int	Primary key, Foreign key to User
chat_enabled	boolean	Enable push untuk chat (default true)
auction_enabled	boolean	Enable push untuk auction (default true)
order_enabled	boolean	Enable push untuk order (default true)
updated_at	datetime	Last update timestamp (default now)

Tabel User_Feature_Access

Nama	Tipe	Keterangan
access_id	int	Primary key, auto increment
user_id	int	Foreign key to User, Null apabila menandakan global
feature_name	enum	"checkout_enabled", "chat_enabled",

		"auction_enabled"
is_enabled	boolean	Default true
reason	text	Alasan disable feature, nullable
updated_at	datetime	Last update timestamp (default now)