

Database Normalization Process

Unnormalized Form (UNF):

- Users: user_id, email, password_hash, first_name, last_name, phone, user_type, created_at, remember_token, remember_token_expires_at, is_active
- Cities: city_id, city_name, country
- Hotels: hotel_id, city, hotel_name, address, hotel_image, title, description, contact_number, email, check_in_time, check_out_time, status, total_capacity, standard_rooms, double_rooms, family_rooms, created_at, updated_at, features (may contain multiple features in a single field)
- Rooms: room_id, hotel_id, room_type_id, room_number, floor_number, base_price, room_image, status, is_active, created_at, updated_at, features (may contain multiple features in a single field)
- Bookings: booking_id, booking_reference, user_id, hotel_id, room_id, currency_id, check_in_date, check_out_date, number_of_guests, special_requests, total_amount, discount_amount, final_amount, booking_date, status, cancellation_charge, payment_status, notes, created_at, updated_at, guest_name, guest_email, guest_phone
- Newsletter Subscribers: subscriber_id, email, subscribed_at, is_active

First Normal Form (1NF):

- Users: user_id, email, password_hash, first_name, last_name, phone, user_type, created_at, remember_token, remember_token_expires_at, is_active

- Password Reset Tokens: id, user_id, token, created_at, expires_at, used
- Email Verification: id, user_id, token, expires_at, used, created_at
- Cities: city_id, city_name, country
- Hotels: hotel_id, city, hotel_name, address, hotel_image, title, description, contact_number, email, check_in_time, check_out_time, status, total_capacity, standard_rooms, double_rooms, family_rooms, created_at, updated_at
- Room Types: room_type_id, type_name, base_price_multiplier, max_occupancy, description, distribution_percentage, created_at, updated_at
- Rooms: room_id, hotel_id, room_type_id, room_number, floor_number, base_price, room_image, status, is_active, created_at, updated_at
- Room Features: feature_id, feature_name, description, icon_class
- Room Feature Mapping: room_id, feature_id
- Bookings: booking_id, booking_reference, user_id, hotel_id, room_id, currency_id, check_in_date, check_out_date, number_of_guests, special_requests, total_amount, discount_amount, final_amount, booking_date, status, cancellation_charge, payment_status, notes, created_at, updated_at
- Booking Details: detail_id, booking_id, guest_name, guest_email, guest_phone, is_primary_guest
- Room Inventory: inventory_id, hotel_id, room_type_id, total_rooms, available_rooms, date

- Reviews: review_id, booking_id, user_id, hotel_id, rating, comment, review_date, is_verified
- Seasons: season_id, season_name, start_date, end_date, is_peak, price_multiplier, created_at, updated_at
- Currencies: currency_id, code, name, symbol, is_active
- Exchange Rates: rate_id, from_currency_id, to_currency_id, rate, last_updated
- Newsletter Subscribers: subscriber_id, email, subscribed_at, is_active, is_verified, verified_at, created_at, updated_at
- Newsletter Audit Log: audit_id, subscriber_id, action, ip_address, user_agent, created_at
- Contact Messages: message_id, name, email, subject, message, created_at, status, updated_at
- Hotel Amenities: amenity_id, hotel_id, amenity_name, description, icon_class
- Gallery: gallery_id, title, image_url, category, description, hotel_id, display_order, is_active, created_at, updated_at
- FAQs: id, question, answer, category, display_order, is_active, submitted_by, is_approved, created_at
- FAQ Suggestions: id, question, user_id, status, created_at

Second Normal Form (2NF):

- Users: user_id, email, password_hash, first_name, last_name, phone, user_type, created_at, remember_token, remember_token_expires_at, is_active

- Password Reset Tokens: id, user_id, token, created_at, expires_at, used
- Email Verification: id, user_id, token, expires_at, used, created_at
- Cities: city_id, city_name, country
- Hotels: hotel_id, city, hotel_name, address, hotel_image, title, description, contact_number, email, check_in_time, check_out_time, status, total_capacity, standard_rooms, double_rooms, family_rooms, created_at, updated_at
- Room Types: room_type_id, type_name, base_price_multiplier, max_occupancy, description, distribution_percentage, created_at, updated_at
- Rooms: room_id, hotel_id, room_type_id, room_number, floor_number, base_price, room_image, status, is_active, created_at, updated_at
- Room Features: feature_id, feature_name, description, icon_class
- Room Feature Mapping: room_id, feature_id
- Bookings: booking_id, booking_reference, user_id, hotel_id, room_id, currency_id, check_in_date, check_out_date, number_of_guests, special_requests, total_amount, discount_amount, final_amount, booking_date, status, cancellation_charge, payment_status, notes, created_at, updated_at
- Booking Details: detail_id, booking_id, guest_name, guest_email, guest_phone, is_primary_guest
- Room Inventory: inventory_id, hotel_id, room_type_id, total_rooms, available_rooms, date

- Reviews: review_id, booking_id, user_id, hotel_id, rating, comment, review_date, is_verified
- Seasons: season_id, season_name, start_date, end_date, is_peak, price_multiplier, created_at, updated_at
- Currencies: currency_id, code, name, symbol, is_active
- Exchange Rates: rate_id, from_currency_id, to_currency_id, rate, last_updated
- Newsletter Subscribers: subscriber_id, email, subscribed_at, is_active, is_verified, verified_at, created_at, updated_at
- Newsletter Audit Log: audit_id, subscriber_id, action, ip_address, user_agent, created_at
- Contact Messages: message_id, name, email, subject, message, created_at, status, updated_at
- Hotel Amenities: amenity_id, hotel_id, amenity_name, description, icon_class
- Gallery: gallery_id, title, image_url, category, description, hotel_id, display_order, is_active, created_at, updated_at
- FAQs: id, question, answer, category, display_order, is_active, submitted_by, is_approved, created_at
- FAQ Suggestions: id, question, user_id, status, created_at

Third Normal Form (3NF):

- Users: user_id, email, password_hash, first_name, last_name, phone, user_type, created_at, remember_token, remember_token_expires_at, is_active

- Password Reset Tokens: id, user_id, token, created_at, expires_at, used
- Email Verification: id, user_id, token, expires_at, used, created_at
- Cities: city_id, city_name, country
- Hotels: hotel_id, city, hotel_name, address, hotel_image, title, description, contact_number, email, check_in_time, check_out_time, status, total_capacity, standard_rooms, double_rooms, family_rooms, created_at, updated_at
- Room Types: room_type_id, type_name, base_price_multiplier, max_occupancy, description, distribution_percentage, created_at, updated_at
- Rooms: room_id, hotel_id, room_type_id, room_number, floor_number, base_price, room_image, status, is_active, created_at, updated_at
- Room Features: feature_id, feature_name, description, icon_class
- Room Feature Mapping: room_id, feature_id
- Bookings: booking_id, booking_reference, user_id, hotel_id, room_id, currency_id, check_in_date, check_out_date, number_of_guests, special_requests, total_amount, discount_amount, final_amount, booking_date, status, cancellation_charge, payment_status, notes, created_at, updated_at
- Booking Details: detail_id, booking_id, guest_name, guest_email, guest_phone, is_primary_guest
- Room Inventory: inventory_id, hotel_id, room_type_id, total_rooms, available_rooms, date

- Reviews: review_id, booking_id, user_id, hotel_id, rating, comment, review_date, is_verified
- Seasons: season_id, season_name, start_date, end_date, is_peak, price_multiplier, created_at, updated_at
- Currencies: currency_id, code, name, symbol, is_active
- Exchange Rates: rate_id, from_currency_id, to_currency_id, rate, last_updated
- Newsletter Subscribers: subscriber_id, email, subscribed_at, is_active, is_verified, verified_at, created_at, updated_at
- Newsletter Audit Log: audit_id, subscriber_id, action, ip_address, user_agent, created_at
- Contact Messages: message_id, name, email, subject, message, created_at, status, updated_at
- Hotel Amenities: amenity_id, hotel_id, amenity_name, description, icon_class
- Gallery: gallery_id, title, image_url, category, description, hotel_id, display_order, is_active, created_at, updated_at
- FAQs: id, question, answer, category, display_order, is_active, submitted_by, is_approved, created_at
- FAQ Suggestions: id, question, user_id, status, created_at