# **Data Dictionary**

 ${\bf Table:}\ {\tt user\_profiles}$ 

Field Name	Data Type	Length	Description
user_id	INT	_	Unique identifier for each user (PK).
first_name	VARCHAR	50	First name of the user.
last_name	VARCHAR	50	Last name of the user.
email	VARCHAR	100	Email address for login and notifications.
phone	VARCHAR	20	Contact phone number of the user.
created_at	DATETIME	_	Timestamp when the profile was created.
user_role	VARCHAR	20	Role of the user (guest, host, admin).

#### Table: hosts

host_id	INT	_	Unique identifier for each host (PK).
user_id	INT	_	FK to user_profiles.user_id.
host_rating	DECIMAL	5,2	Average rating of the host.
verification_status	BOOLEAN	_	Whether the host is verified.

## Table: guests

guest_id	INT	_	Unique identifier for each guest (PK).
user_id	INT	_	FK to user_profiles.user_id.

#### Table: admin\_users

admin_id	INT	_	Unique identifier for each admin (PK).
user_id	INT	_	FK to user_profiles.user_id.
admin_level	INT	_	Permission level (e.g. 1=standard, 2=super).
privileges	TEXT	_	Detailed privileges (e.g. JSON).
reports_to	INT	-	FK to supervising admin_users.admin_id (re-
			cursive).

### ${\bf Table:}\ {\tt property\_listings}$

property_id	INT	_	Unique identifier for each property (PK).
host_id	INT	_	FK to hosts.host_id.
title	VARCHAR	150	Title of the listing.
description	TEXT	_	Detailed description of the property.
property_type	VARCHAR	50	Type of property (e.g. apartment, house).
room_type	VARCHAR	50	Type of room (entire home, private room).
address	VARCHAR	255	Street address of the property.
city	VARCHAR	50	City where the property is located.
state	VARCHAR	50	State or region.
country	VARCHAR	50	Country.
zipcode	VARCHAR	10	Postal code.
created_at	DATETIME	_	Timestamp when the listing was created.

#### Table: reservations

reservation_id	INT	_	Unique identifier for each reservation (PK).
property_id	INT	_	FK to property_listings.property_id.
guest_id	INT	_	FK to guests.guest_id.
check_in	DATE	_	Check-in date.
check_out	DATE	_	Check-out date.
status	VARCHAR	20	Reservation status (confirmed, cancelled,
			pending).
booked_at	DATETIME	_	Timestamp when booking was made.

#### Table: property\_reviews

review_id	INT	_	Unique identifier for each property review
			(PK).
property_id	INT	_	FK to property_listings.property_id.
guest_id	INT	_	FK to guests.guest_id.
rating	INT	_	Rating between 1 and 5.
comment	TEXT	_	Review text.
review_date	DATE	_	Date of the review.

#### Table: host\_reviews

review_id	INT	_	Unique identifier for each host review (PK).
host_id	INT	_	FK to hosts.host_id.
guest_id	INT	_	FK to guests.guest_id.
rating	INT	_	Rating between 1 and 5.
comment	TEXT	_	Review text.
review_date	DATE	_	Date of the review.

### ${\bf Table:}\ {\tt property\_images}$

image_id	INT	_	Unique identifier for each image (PK).
property_id	INT	_	FK to property_listings.property_id.
image_url	VARCHAR	255	URL of the image.
caption	VARCHAR	150	Short caption for the image.
uploaded_at	DATETIME	_	Timestamp when image was uploaded.

#### Table: amenities

amenity_id	INT	_	Unique identifier for each amenity (PK).
amenity_name	VARCHAR	50	Name of the amenity.
description	TEXT	_	Description of the amenity.

### ${\bf Table:} \ {\tt listing\_amenities}$

property_id	INT	_	FK to property_listings.property_id.
amenity_id	INT	_	FK to amenities.amenity_id.

#### Table: calendar\_availability

property_id	INT	-	FK to property_listings.property_id.
available_date	DATE	_	Date of availability.
is_available	BOOLEAN	_	Availability flag.
price	DECIMAL	8,2	Price for that date.

### Table: pricing\_history

pricing_id	INT	_	Unique identifier for each pricing record (PK).
property_id	INT	_	${ m FK\ to\ property\_listings.property\_id.}$
price	DECIMAL	8,2	Historical price value.
start_date	DATE	_	Start of pricing period.
end_date	DATE	_	End of pricing period.

#### Table: transactions

transaction_id	INT	_	Unique identifier for each transaction (PK).
reservation_id	INT	_	FK to reservations.reservation_id.
transaction_date	DATETIME	_	Timestamp of the transaction.
amount	DECIMAL	10,2	Transaction amount.
payment_method	VARCHAR	50	Method used (credit card, etc.).
status	VARCHAR	20	Transaction status.

#### Table: messages

message_id	INT	_	Unique identifier for each message (PK).
reservation_id	INT	_	FK to reservations.reservation_id.
sender_id	INT	_	FK to user_profiles.user_id.
receiver_id	INT	_	FK to user_profiles.user_id.
content	TEXT	_	Body of the message.
sent_at	DATETIME	_	Timestamp when sent.

### Table: property\_rules

rule_id	INT	_	Unique identifier for each rule (PK).
property_id	INT	_	FK to property_listings.property_id.
rule_description	TEXT	_	Description of the rule.

#### ${\bf Table:}\ {\tt cancellation\_policies}$

policy_id	INT	_	Unique identifier for each policy (PK).
policy_name	VARCHAR	50	Name of the cancellation policy.
description	TEXT	_	Details of the policy.
refund_percentage	DECIMAL	5,2	Percentage of refund.

### Table: support\_tickets

ticket_id	INT	_	Unique identifier for each ticket (PK).
user_id	INT	_	FK to user_profiles.user_id.
subject	VARCHAR	150	Ticket subject.
description	TEXT	_	Detailed issue description.
status	VARCHAR	20	Ticket status.
created_at	DATETIME	_	Creation timestamp.
resolved_at	DATETIME	_	Resolution timestamp (nullable).

## ${\bf Table:}\ {\tt user\_activity\_logs}$

log_id	INT	_	Unique identifier for each log entry (PK).
user_id	INT	_	FK to user_profiles.user_id.
activity_type	VARCHAR	50	Type of activity recorded.
activity_timestamp	DATETIME	_	When the activity occurred.
description	TEXT	_	Details of the activity.

### Table: referral\_programs

referral_id	INT	_	Unique identifier for each referral event (PK).
referrer_user_id	INT	_	FK to referrer in user_profiles.user_id.
referred_user_id	INT	_	FK to referred user in
			user_profiles.user_id.
referral_code	VARCHAR	50	Code used for the referral.
created_at	DATETIME	_	Timestamp when referral was created.
status	VARCHAR	20	Status of referral (pending, completed, re-
			warded).

## ${\bf Table:}\ {\tt dispute\_resolution}$

resolution_id	INT	_	Unique identifier for each resolution (PK).
ticket_id	INT	_	FK to support_tickets.ticket_id.
admin_id	INT	_	FK to admin_users.admin_id.
reservation_id	INT	_	FK to reservations.reservation_id.
resolution_date	DATETIME	_	When the dispute was resolved.
resolution_details	TEXT	_	Details of the resolution.

#### Table: referral\_rewards

reward_id	INT	_	Unique identifier for each reward (PK).
referral_id	INT	_	FK to referral_programs.referral_id.
transaction_id	INT	_	FK to transactions.transaction_id.
admin_id	INT	_	FK to admin_users.admin_id.
reward_amount	DECIMAL	10,2	Amount rewarded to the user.
reward_date	DATETIME	_	Timestamp when the reward was issued.