



## Excel to ClickHouse Data Management System

System Name:	Excel to ClickHouse Data Manager
Creation Date:	20/07/2025 11:52:20
Version:	1.0
Author:	AI Assistant
Processor:	11 ██████████
Last Update:	████████/███████████



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## 1. [REDACTED]

Excel	ClickHouse
3	:
4	4
3	3

[REDACTED]:

- [REDACTED] SQL
- Comment [REDACTED]
- [REDACTED] Database Normalization
- [REDACTED]
- Primary Key [REDACTED] Indexing [REDACTED]
- [REDACTED] Data Type [REDACTED]

## 2. [REDACTED]

### 2.1 [REDACTED] bookings - [REDACTED]

Field Name	Data Type	Comment
booking_id	UInt32	[REDACTED] (Primary Key)
booking_date	Nullable(String)	[REDACTED]
booking_time	Nullable(String)	[REDACTED]
datetime_display	Nullable(String)	[REDACTED]-[REDACTED]
receipt_number	Nullable(String)	[REDACTED]
booking_channel	Nullable(String)	[REDACTED]
agency_id	Nullable(Float64)	[REDACTED]
booking_type	Nullable(String)	[REDACTED]
customer_id	Nullable(Float64)	[REDACTED]
customer_name	Nullable(String)	[REDACTED]
phone_number	Nullable(String)	[REDACTED]
booking_note	Nullable(String)	[REDACTED]
created_by	Nullable(String)	[REDACTED]
created_at	DateTime	[REDACTED]

### 2.2 [REDACTED] services - [REDACTED]

Field Name	Data Type	Comment
booking_id	UInt32	[REDACTED] (Foreign Key)
service_item	Nullable(String)	[REDACTED]
service_duration	Nullable(Float64)	[REDACTED] ([REDACTED])
service_price	Nullable(UInt16)	[REDACTED]
service_discount	Nullable(Float64)	[REDACTED]
total_items	Nullable(Float64)	[REDACTED]
service_cost	Nullable(Float64)	[REDACTED]

## 2.3 payments - [REDACTED]

[REDACTED]  
[REDACTED]

Field Name	Data Type	Comment
booking_id	UInt32	[REDACTED] (Foreign Key)
total_price	Nullable(Float64)	[REDACTED]
total_discount	Nullable(Float64)	[REDACTED]
price_after_discount	Nullable(Float64)	[REDACTED]
service_charge	Nullable(Float64)	[REDACTED]
additional_charge	Nullable(Float64)	[REDACTED]
price_before_vat	Nullable(String)	[REDACTED] VAT
vat_amount	Nullable(String)	[REDACTED] VAT 7%
total_tip	Nullable(Float64)	[REDACTED]
agency_commission	Nullable(UInt8)	[REDACTED]
net_payment	Nullable(Float64)	[REDACTED]
cash_payment	Nullable(Float64)	[REDACTED]
transfer_payment	Nullable(Float64)	[REDACTED]
credit_card_payment	Nullable(Float64)	[REDACTED]
agency_payment	Nullable(Float64)	[REDACTED]
package_payment	Nullable(Float64)	[REDACTED]
ewallet_payment	Nullable(Float64)	[REDACTED] E-Wallet
ewallet_type	Nullable(String)	[REDACTED] E-Wallet
payment_note	Nullable(String)	[REDACTED]

Field Name	Data Type	Comment
booking_id	UInt32	██████████ (Foreign Key)
staff_sequence	UInt8	██████████ (1, 2)
staff_name	Nullable(String)	███████████
staff_fee	Nullable(Float64)	███████████
staff_tip	Nullable(Float64)	███████████
request_fee	Nullable(Float64)	███████████

**3.** [REDACTED]

**5.** [REDACTED]

- bookings (1) → services (M) - [REDACTED]
- bookings (1) → payments (1) - [REDACTED]
- bookings (1) → staff\_assignments (M) - [REDACTED]
- staff\_wages [REDACTED] staff\_assignments [REDACTED] staff\_name
- service\_sales [REDACTED] services
- daily\_summary [REDACTED] payments

## 6. SQL Query

```
SELECT COUNT(*) as total_bookings FROM bookings;
```

## 6.2

```
SELECT booking_date, COUNT(*) as bookings_count, SUM(net_payment) as total_revenue FROM bookings b JOIN payments p ON b.booking_id = p.booking_id GROUP BY booking_date ORDER BY booking_date;
```

**6.3** 

```
SELECT service_item, COUNT(*) as usage_count, AVG(service_price) as avg_price FROM services WHERE service_item IS NOT NULL GROUP BY service_item ORDER BY usage_count DESC LIMIT 10;
```

## 7. [REDACTED]

1. [REDACTED]: python main.py --create-tables
2. [REDACTED] sample.xlsx: python main.py --upload-data
3. [REDACTED] Excel [REDACTED]: python main.py --upload-only filename.xlsx
4. [REDACTED]: python main.py --all
5. [REDACTED]: python main.py --info