db_sa
Data Dictionary

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1. Introduction

A data dictionary is a collection of metadata such as object name, data type, size, classification, and relationships with other data assets. It is used by data administrators, analysts, and engineers to understand and trust data assets. It helps in the creation of authentic, transparent, and consistent data throughout the organization.

In this data dictionary, following servers are chosen for documentation:
MYSQL (MySQL)

For each server, definitions of tables (entities/collections), views, functions are listed in order. Detailed properties of data elements (data type, size, nullability, optionality, indexes, foreign keys, constraints) are organized in tabular format.

2. Server: MYSQL (MySQL)

Version: 10.4.32-MariaDB

1 database is listed below.

2.1. Database: db_sa

Database objects to be listed: 9 tables

2.1.1. Tables

2.1.1.1. Table: branch

Fields

Pos	Name	Type	Not Null	Others
1	branch_id 🔑	int(11) Auto Increment	✓	
2	branch_name	varchar(255)	✓	Index: branch_name
3	branch_address	text	✓	
4	phone	varchar(15)	✓	Index: phone

Indexes

Name	Type	Method	Fields
branch_name	UNIQUE	BTREE	branch_name
phone	UNIQUE	BTREE	phone

2.1.1.2. Table: category

Fields

Pos	Name	Type	Not Null	Others
1	category_id 🔑	int(11) Auto Increment	✓	
2	category_name	varchar(255)	✓	

2.1.1.3. Table: customer

Fields

Pos	Name	Type	Not Null	Others
1	customer_id 🔑	int(11) Auto Increment	✓	
2	customer_name	varchar(255)	✓	
3	tel	varchar(15)	✓	
4	password	varchar(255)	✓	
5	address	text		
6	created_at	timestamp	✓	Default: current_timestamp()
7	image	blob		

2.1.1.4. Table: invoice

Fields

Pos	Name	Type	Not Null	Others
1	invoice_id 🔑	int(11) Auto Increment	✓	
2	order_id	int(11)		Index: order_id
3	invoice_date	timestamp	✓	Default: current_timestamp()

Indexes

Name	Type	Method	Fields
order_id	NORMAL	BTREE	order_id

Foreign Keys

Name	Fields	Referenced Table	Referenced Fields	On Delete	On Update
invoice_ibfk_1	order_id	db_sa.order	order_id	RESTRICT	RESTRICT

2.1.1.5. Table: order

Fields

Pos	Name	Type	Not Null	Others
1	order_id 🔑	int(11) Auto Increment	✓	
2	customer_id	int(11)		Index: customer_id
3	order_date	timestamp	✓	Default: current_timestamp()
4	total_amount	decimal(10, 2)	✓	

Indexes

Name	Type	Method	Fields
customer_id	NORMAL	BTREE	customer_id

Foreign Keys

Name	Fields	Referenced Table	Referenced Fields	On Delete	On Update
order_ibfk_1	customer_id	db_sa.customer	customer_id	RESTRICT	RESTRICT

2.1.1.6. Table: order_detail

Fields

Pos	Name	Type	Not Null	Others
1	order_detail_id 🔑	int(11) Auto Increment	✓	
2	order_id	int(11)		Index: order_id
3	product_id	int(11)		Index: product_id
4	qty	int(11)	✓	
5	price	decimal(10, 2)	✓	

Indexes

Name	Type	Method	Fields
order_id	NORMAL	BTREE	order_id
product_id	NORMAL	BTREE	product_id

Foreign Keys

Name	Fields	Referenced Table	Referenced Fields	On Delete	On Update
order_detail_ibfk_1	order_id	db_sa.order	order_id	RESTRICT	RESTRICT
order_detail_ibfk_2	product_id	db_sa.product	product_id	RESTRICT	RESTRICT

2.1.1.7. Table: payment

Fields

Pos	Name	Type	Not Null	Others
1	payment_id 🔑	int(11) Auto Increment	✓	
2	invoice_id	int(11)		Index: invoice_id
3	payment_date	timestamp	✓	Default: current_timestamp()
4	amount	decimal(10, 2)		
5	payment_method	enum	✓	
6	branch_id	int(11)		Index: branch_id

Indexes

Name	Type	Method	Fields
invoice_id	NORMAL	BTREE	invoice_id
branch_id	NORMAL	BTREE	branch_id

Foreign Keys

Name	Fields	Referenced Table	Referenced Fields	On Delete	On Update
payment_ibfk_1	invoice_id	db_sa.invoice	invoice_id	RESTRICT	RESTRICT
payment_ibfk_2	branch_id	db_sa.branch	branch_id	RESTRICT	RESTRICT

2.1.1.8. Table: product

Fields

Pos	Name	Type	Not Null	Others
1	product_id 🔑	int(11) Auto Increment	✓	
2	product_name	varchar(255)	✓	
3	description	text		
4	image	blob		
5	price	decimal(10, 2)	✓	
6	instock	int(11)		Default: 0
7	category_id	int(11)		Index: category_id
8	created_at	timestamp	✓	Default: current_timestamp()
9	brand	varchar(255)		

Indexes

Name	Type	Method	Fields
category_id	NORMAL	BTREE	category_id

Foreign Keys

Name	Fields	Referenced Table	Referenced Fields	On Delete	On Update
product_ibfk_1	category_id	db_sa.category	category_id	RESTRICT	RESTRICT

2.1.1.9. Table: staff

Fields

Pos	Name	Type	Not Null	Others
1	staff_id 🔑	int(11) Auto Increment	✓	
2	staff_name	varchar(255)	✓	
3	image	blob		
4	tel	varchar(15)	✓	
5	password	varchar(255)	✓	
6	branch_id	int(11)		Index: branch_id

Indexes

Name	Type	Method	Fields
branch_id	NORMAL	BTREE	branch_id

Foreign Keys

Name	Fields	Referenced Table	Referenced Fields	On Delete	On Update
staff_ibfk_1	branch_id	db_sa.branch	branch_id	RESTRICT	RESTRICT