

Hotel Database Management System

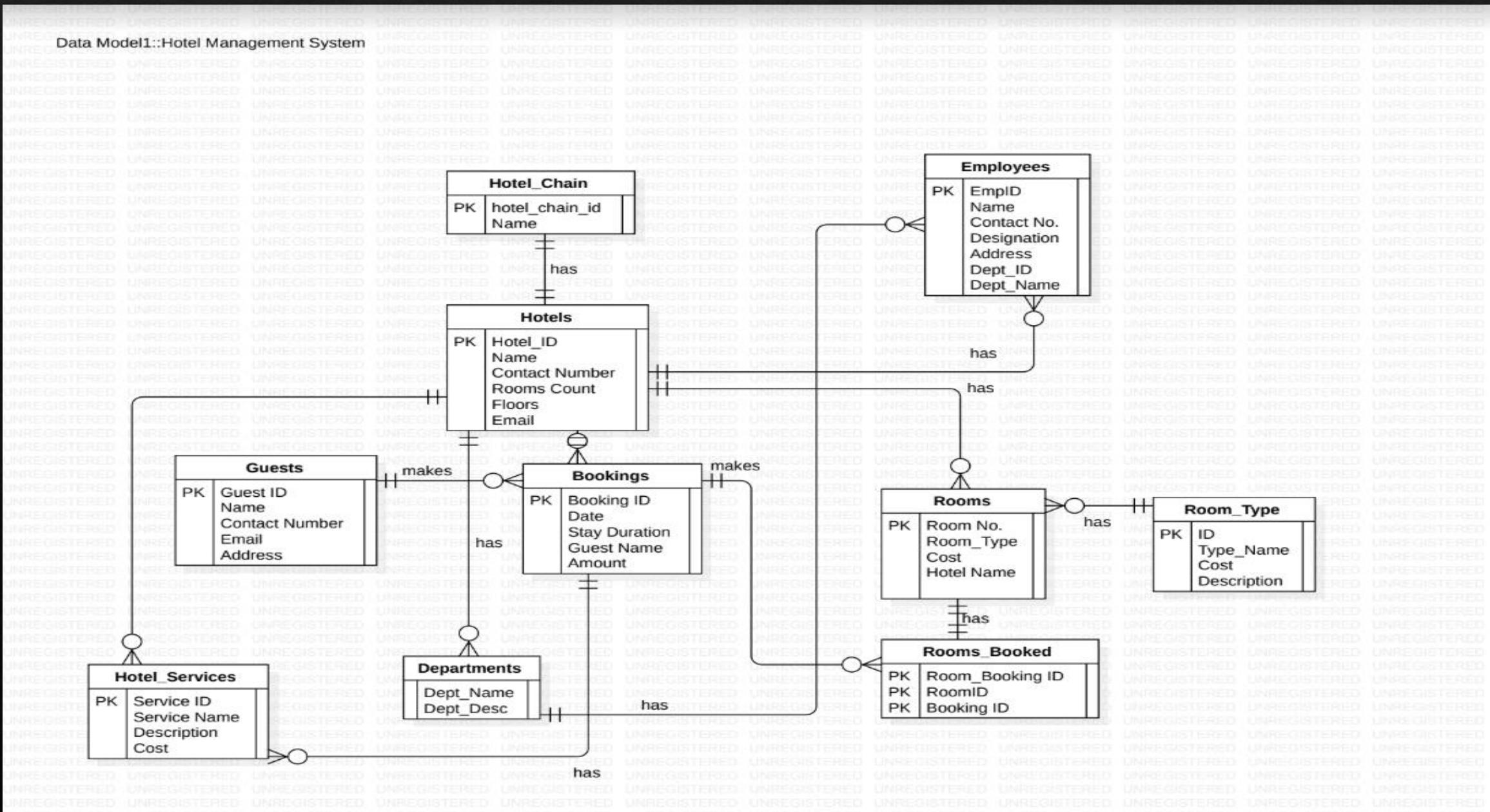
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ER Diagram



In - Built Functions

Count Function

MySQL Workbench

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

hotel_database

- Tables
- Views
- Stored Procedures
- Functions

sys

Query 1

```
1 -- How many hotels are in a hotel chain?
2 SELECT count(*) AS 'Total Hotels'      -- count of total hotels
3 FROM hotel_chain_has_hotel
4 WHERE hotel_chains_hotel_chain_id = 1;  -- for hotel chain 'best western hotels'
```

SQL Additions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid | Filter Rows: Export: Wrap Cell Content:

Total Hotels
4

Administration Schemas

No object selected

Result 2

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	20:44:49	SELECT guest_first_name, guest_last_name, guest_contact_number FROM guests WHERE guest_id IN (SELE...	5 row(s) returned	0.016 sec / 0.000 sec
2	20:47:01	SELECT count(*) AS 'Total Hotels' -- count of total hotels FROM hotel_chain_has_hotel WHERE hotel_chains_...	1 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

Sum Function

MySQL Workbench

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

hotel_database

- Tables
- Views
- Stored Procedures
- Functions

sys

Query 1

```
1 many rooms are booked in a particular hotel on a given date?
2 ECT SUM(total_rooms_booked) AS 'Total Rooms Booked'      -- sum of total rooms
3 M `bookings`
4 RE booking_date LIKE '2018-06-08%' AND hotel_hotel_id = 1;  -- for date 6th August,2018; and for hotel(King George Inn & Suites) with id 1
```

SQL Additions

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Total Rooms Booked | 5 | Result Grid | Form Editor | Read Only | Context Help | Snippets

No object selected

Result 4

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	20:44:49	SELECT guest_first_name, guest_last_name, guest_contact_number FROM guests WHERE guest_id IN (SELECT guest_id FROM bookings WHERE booking_date LIKE '2018-06-08%' AND hotel_hotel_id = 1)	5 row(s) returned	0.016 sec / 0.000 sec
2	20:47:01	SELECT count(*) AS 'Total Hotels' -- count of total hotels FROM hotel_chain_has_hotel WHERE hotel_chains_id = 1	1 row(s) returned	0.000 sec / 0.000 sec
3	22:41:37	SELECT count(*) AS 'Total Hotels' -- count of total hotels FROM hotel_chain_has_hotel WHERE hotel_chains_id = 1	1 row(s) returned	0.015 sec / 0.000 sec
4	22:41:54	SELECT SUM(total_rooms_booked) AS 'Total Rooms Booked' -- sum of total rooms FROM `bookings` WHERE booking_date LIKE '2018-06-08%' AND hotel_hotel_id = 1	1 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

Nested Queries

How many distinct guest have made bookings for a particular month?

The screenshot shows the MySQL Workbench interface with the following details:

- MySQL Workbench Window:** The main window title is "MySQL Workbench". It has tabs for "HDMS_Demo (hotel_database)" and "HDMS_Demo (hotel_database)".
- File Bar:** Includes File, Edit, View, Query, Database, Server, Tools, Scripting, Help.
- Toolbar:** Includes icons for New, Open, Save, Print, Copy, Paste, Find, Replace, and others.
- Navigator:** Shows the "Schemas" tree with "hotel_database" selected, containing Tables, Views, Stored Procedures, Functions, and sys.
- Query Editor:** Titled "Query 1", contains the following SQL code:

```
1 -- How many distinct guest have made bookings for a particular month?
2 •     SELECT guest_first_name, guest_last_name, guest_contact_number
3     FROM guests
4     WHERE guest_id IN
5         ( SELECT DISTINCT guests_guest_id      -- get distinct guests
6             FROM bookings
7             WHERE MONTH(check_in_date) = 8);    -- bookings for the month of August
```
- Result Grid:** Displays the results of the query in a grid format. The columns are "guest_first_name", "guest_last_name", and "guest_contact_number". The data is:

guest_first_name	guest_last_name	guest_contact_number
Jane	Doe	132-456-8564
Jerry	Thachter	564-896-4752
Rihanna	Perry	745-986-7451
Mathew	Jose	489-624-8633
Jessica	Smith	487-956-8963
- Output Panel:** Titled "guests 1", shows the execution log:

#	Time	Action	Message	Duration / Fetch
1	20:44:49	SELECT guest_first_name, guest_last_name, guest_contact_number FROM guests WHERE guest_id IN (SELE...	5 row(s) returned	0.016 sec / 0.000 sec
- System Tray:** Shows a weather icon (30°C), battery level, and system status.
- Bottom Bar:** Includes icons for Home, Back, Forward, Stop, Refresh, and others.

All the unique countries hotels are located in

MySQL Workbench

File Edit View Query Database Server Tools Scripting Help

Navigator: Query 1

SCHEMAS hotel_database

1 all the unique countries hotels are located in.
2 ECT DISTINCT country -- unique countries
3 M addresses
4 RE address_id IN -- compare to get addresses of hotels
5 (SELECT addresses_address_id -- address id of hotels
6 FROM hotel);

SQLAdditions: Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid | Filter Rows: Export: Wrap Cell Content: Result Grid

country
Canada
USA
India
Bangladesh

Administration Schemas Information: No object selected

addresses5 x Output Action Output

#	Time	Action	Message	Duration / Fetch
1	20:44:49	SELECT guest_first_name, guest_last_name, guest_contact_number FROM guests WHERE guest_id IN (SELE...	5 row(s) returned	0.016 sec / 0.000 sec
2	20:47:01	SELECT count(*) AS 'Total Hotels' - count of total hotels FROM hotel_chain_has_hotel WHERE hotel_chains_...	1 row(s) returned	0.000 sec / 0.000 sec
3	22:41:37	SELECT count(*) AS 'Total Hotels' - count of total hotels FROM hotel_chain_has_hotel WHERE hotel_chains_...	1 row(s) returned	0.015 sec / 0.000 sec
4	22:41:54	SELECT SUM(total_rooms_booked) AS 'Total Rooms Booked' - sum of total rooms FROM 'bookings' WHERE ...	1 row(s) returned	0.000 sec / 0.000 sec
5	22:43:32	SELECT DISTINCT country - unique countries FROM addresses WHERE address_id IN -- compare to get addre...	4 row(s) returned	0.016 sec / 0.000 sec

Object Info Session 20°C 10:42 PM

NESTED Query WITH JOIN Query

MySQL Workbench

HDMS_Demo

File Edit View Query Database Server Tools Scripting Help

Navigator: Schemas

SCHEMAS

Filter objects

hotel_database

- Tables
- Views
- Stored Procedures
- Functions

sys

Query 1

```
1 -- List the rate for a room at a given time during the year.
2 SELECT ROUND((r_type.room_cost - ((r_dis.discount_rate * r_type.room_cost)/100)), 2) AS 'Room Rate' -- get room price on the basis of discount
3 FROM room_rate_discount r_dis JOIN room_type r_type -- join rate discount table with room type
4 ON r_dis.room_type_room_type_id = r_type.room_type_id
5 WHERE r_type.room_type_id
6 IN ( Select rooms_type_rooms_type_id from rooms where room_id = 1) -- get room type id for room with id 1
7 AND MONTH(NOW()) BETWEEN r_dis.start_month AND r_dis.end_month; -- get discount rate for current month
```

SQLAdditions: Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Administration Schemas

Information: No object selected

Result Grid | Filter Rows: Export: Wrap Cell Content:

Room Rate
103.00

Result Grid Form Editor

Result 1

Action Output

#	Time	Action	Message	Duration / Fetch
1	01:25:19	SELECT ROUND((r_type.room_cost - ((r_dis.discount_rate * r_type.room_cost)/100)), 2) AS 'Room Rate' -- get ro... 1 row(s) returned	1 row(s) returned	0.016 sec / 0.000 sec

Object Info Session

Set Operators & Views

Union Command

Getting Distinct Guests names from hotel and guests table

The screenshot shows the MySQL Workbench interface with the following details:

- MySQL Workbench Window:** The title bar reads "MySQL Workbench". The tabs show "HDMS_Demo (hotel_database)" and "Query 1".
- Navigator:** Shows the "hotel_database" schema with objects: Tables, Views, Stored Procedures, Functions, and sys.
- Query Editor (Query 1):** Contains the following SQL code:

```
-- Get a combined list of distinct guest names and hotel names.  
SELECT guest_first_name AS 'Name', 'Guest' AS 'Type' FROM guests  
UNION  
SELECT hotel_name AS 'Name', 'Hotel' AS 'Type' FROM hotel;
```
- Result Grid:** Displays the combined results in a grid format. The columns are "Name" and "Type". The data is:

Name	Type
Jane	Guest
Jerry	Guest
Rihanna	Guest
Mathew	Guest
Jessica	Guest
King George Inn & Suites	Hotel
Copper Hills Inn	Hotel
Sawmill Inn	Hotel
Northgate Inn	Hotel
- Action Output:** Shows the execution log with two entries:

#	Time	Action	Message	Duration / Fetch
1	20:44:49	SELECT guest_first_name, guest_last_name, guest_contact_number FROM guests WHERE guest_id IN (SE...)	5 row(s) returned	0.016 sec / 0.000 sec
2	20:47:01	SELECT count(*) AS 'Total Hotels' -- count of total hotels FROM hotel_chain_has_hotel WHERE hotel_chains...	1 row(s) returned	0.000 sec / 0.000 sec

Intersect Command

Find common countries where hotels are located and where guests are from

The screenshot shows the MySQL Workbench interface with the following details:

- Navigator:** Shows the **hotel_database** schema with tables, views, stored procedures, and functions.
- Query Editor (Query 1):** Contains the SQL code:

```
1 -- Find common countries where hotels are located and where guests are from.
2 SELECT country FROM addresses WHERE address_id IN (SELECT addresses_address_id FROM hotel)
3 INTERSECT
4 SELECT country FROM addresses WHERE address_id IN (SELECT address_id FROM guests);
```
- Result Grid:** Displays the results of the query, showing countries: Canada, USA, India, and Bangladesh.
- Output Window:** Shows the execution log with two rows:

#	Time	Action	Message	Duration / Fetch
8	22:53:21	SELECT country FROM addresses WHERE address_id IN (SELECT addresses_address_id FROM hotel)	M... Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds to your MySQL se...	0.000 sec
9	22:53:59	SELECT country FROM addresses WHERE address_id IN (SELECT addresses_address_id FROM hotel) INTERSECT SELECT country FROM addresses WHERE address_id IN (SELECT address_id FROM guests);	4 row(s) returned	0.016 sec / 0.000 sec

View Command

Creating view hotel_guests

The screenshot shows the MySQL Workbench interface with the following details:

- Database:** HDMs_Demo
- Query Editor:** Query 1 contains the SQL code for creating the view:

```
1 -- create view named hotel_guests to get details of the guests
2 • CREATE OR REPLACE VIEW hotel_guests AS
3   SELECT guest_first_name AS 'First Name', guest_last_name AS 'Last Name', guest_email_address AS 'Email Address', guest_contact_number AS 'Cont
4     FROM guests
5     JOIN addresses ON addresses.address_id = guests.addresses_address_id
6     WHERE guests.guest_id IN
7       (SELECT distinct guests_guest_id      -- get distinct guests
8         FROM bookings
9         WHERE hotel_hotel_id = 1);        -- for hotel(King George Inn & Suites) with id 1
10
11 •   SELECT * FROM hotel_guests;
```

- Result Grid:** Shows the results of the query, displaying guest details:

First Name	Last Name	Email Address	Contact Number	country	state	zipcode
Jane	Doe	jane.doe@gmail.com	132-456-8564	Canada	ON	N2C 2P6
Jerry	Thachter	jerry.ytsgv@gmail.com	564-896-4752	Canada	ON	N2C 2M6
Rihanna	Perry	rjh.vfdj89@gmail.com	745-986-7451	Canada	ON	N2C 2K3
Mathew	Jose	mathew.jose@gmail.com	489-624-8633	Canada	ON	N2A 0E4
Jessica	Smith	jess.smith@gmail.com	487-956-8963	Canada	ON	N2C 2E8

- Action Output:** Shows the log of actions taken during the session, including the creation of the view.

View Command

Creating view hotel_employees

The screenshot shows the MySQL Workbench interface with the following details:

- MySQL Workbench Window:** The title bar says "MySQL Workbench HDMS_Demo".
- Navigator:** Shows the "hotel_database" schema with objects: Tables, Views, Stored Procedures, Functions, and sys.
- Query Editor (Query 1):** Displays the SQL code for creating a view:

```
1 -- create view named hotel_employees to get details of all the employees
2 CREATE OR REPLACE VIEW hotel_employees AS
3     SELECT emp_first_name AS 'First Name', emp_last_name AS 'Last Name', emp_email_address AS 'Email Address', emp_contact_number AS 'Contact
4     FROM employees
5     JOIN department
6     ON department.department_id = employees.department_department_id;
7
8 •    SELECT * FROM hotel_employees;
```
- Result Grid:** Shows the results of the query, displaying employee details in a grid format. The columns are First Name, Last Name, Email Address, Contact Number, and Department. The data includes:

First Name	Last Name	Email Address	Contact Number	Department
Jen	Fen	jen.rds@gmail.com	123-789-7896	Kitchen
Tom	Pitt	tom.pit@gmail.com	565-789-7896	Front Staff
David	Lawrence	david.lawr@gmail.com	852-789-7896	Cleaning
Joseph	Aniston	joseph.anis@gmail.com	765-789-7896	Cleaning
Jeny	Patel	jeny.patel@gmail.com	531-789-7896	Front Staff
- Output Tab:** Shows the execution log with actions and their details. The last action is the creation of the view "hotel_employees".
- System Tray:** Shows system icons including a weather forecast for "Tomorrow's high Near record".

PL/SQL Procedures and Functions

PL/SQL Procedure

Procedure to Insert New Booking

The screenshot shows the MySQL Workbench interface with a PL/SQL procedure named `insert_booking`. The procedure takes several parameters and handles errors by rolling back the transaction if an exception occurs. It then inserts the booking into the `bookings` table and commits the transaction, returning a success message.

```
DELIMITER //
CREATE PROCEDURE insert_booking (
    in_guest_id INT,
    in_check_in_date DATETIME,
    in_duration_of_stay VARCHAR(10),
    in_booking_payment_type VARCHAR(45),
    in_total_rooms_booked INT,
    in_hotel_id INT,
    in_employee_id INT,
    in_total_amount DECIMAL(10, 2)
)
BEGIN
    DECLARE EXIT HANDLER FOR SQLEXCEPTION
    BEGIN
        ROLLBACK;
        SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = 'Error: Unable to insert booking.';
    END;

    START TRANSACTION;
    INSERT INTO bookings (guests_guest_id, check_in_date, duration_of_stay, booking_payment_type, total_rooms_booked, hotel_id, employee_id, total_amount)
    VALUES (in_guest_id, in_check_in_date, in_duration_of_stay, in_booking_payment_type, in_total_rooms_booked, in_hotel_id, in_employee_id, in_total_amount);
    COMMIT;
    SELECT 'Booking inserted successfully.' AS Message;
END //
DELIMITER ;
```

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

MySQL Workbench

HDMS_Demo (hotel_database) x HDMS_Demo (hotel_database) x

File Edit View Query Database Server Tools Scripting Help

SQl

Navigator: SCHEMAS

Filter objects

hotel_database

- Tables
 - addresses
 - bookings
 - Columns
 - booking_id
 - booking_date
 - duration_of_
 - check_in_dat
 - check_out_da
 - booking_pay
 - total_rooms_
 - hotel_hotel_i
 - guests_gues
 - employees_e
 - total_amount
 - Indexes
 - Foreign Keys
 - Triggers- department
- employees
- guests
- hotel

Administration Schemas

Information

Column: booking_id

Definition: booking_id int PK

Query 1 x

Limit to 1000 rows

1 • CALL insert_booking(1, NOW(), '5 days', 'Credit Card', 2, 1, 1, 500.00);

2 |

Result Grid Filter Rows: Export: Wrap Cell Content: Message Booking inserted successfully.

Result 14 x

Action Output

#	Time	Action
1	00:07:33	CALL insert_booking(1, NOW(), '5 days', 'Credit Card', 2, 1, 1, 500.00)

Message 1 row(s) returned Duration / Fetch 0.031 sec / 0.000 sec

SQLAdditions: Jump to

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Object Info Session

MySQL Workbench

HDMS_Demo (hotel_database) x HDMS_Demo (hotel_database) x

File Edit View Query Database Server Tools Scripting Help

SQl

Navigator: SCHEMAS

Filter objects

hotel_database

- Tables
 - addresses
 - bookings
- Columns
 - booking_id
 - booking_date
 - duration_of_stay
 - check_in_date
 - check_out_date
 - booking_payment_type
 - total_rooms_booked
 - hotel_hotel_id
 - guests_guest_id
 - employees_employee_id
 - total_amount
- Indexes
- Foreign Keys
- Triggers
- department
- employees
- guests
- hotel

Administration Schemas

Information

Column: booking_id

Definition: booking_id int PK

Query 1

1 • select * from bookings;

Result Grid

booking_id	booking_date	duration_of_stay	check_in_date	check_out_date	booking_payment_type	total_rooms_booked	hotel_hotel_id	guests_guest_id
14	2018-08-14 00:00:00	2	2018-08-16 12:00:00	2018-08-18 23:00:00	card	2	1	4
15	2018-08-14 00:00:00	3	2018-08-17 12:00:00	2018-08-20 23:00:00	card	3	1	2
17	NULL	5 days	2024-04-17 00:07:33	NULL	Credit Card	2	1	1
*	NULL		NULL	NULL	NULL	NULL	NULL	NULL

bookings 15 x

Action Output

#	Time	Action	Message	Duration / Fetch
1	00:07:33	CALL insert_booking(1, NOW(), '5 days', 'Credit Card', 2, 1, 1, 500.00)	1 row(s) returned	0.031 sec / 0.000 sec
2	00:09:03	select * from bookings LIMIT 0, 1000	16 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

PL/SQL Functions

Function to Calculate total amount

The screenshot shows the MySQL Workbench interface with the following details:

- Navigator:** Shows the **hotel_database** schema, specifically the **bookings** table and its columns: booking_id, booking_date, duration_of_, check_in_dat, check_out_d, booking_pay, total_rooms_, hotel_hotel_i, guests_guest, employees_e, and total_amount.
- Query Editor (Query 1):** Contains the PL/SQL code for creating a function.

```
1  DELIMITER //
2
3  CREATE FUNCTION calculate_total_amount(
4      in_room_rate DECIMAL(10, 2),
5      in_duration INT
6  ) RETURNS DECIMAL(10, 2) DETERMINISTIC
7  BEGIN
8      DECLARE total_amount DECIMAL(10, 2);
9      SET total_amount := in_room_rate * in_duration;
10     RETURN total_amount;
11 END;
12 //
13
14 DELIMITER ;
15 |
```
- Output:** Shows the execution log:

Action	Time	Action	Message	Duration / Fetch
CREATE FUNCTION calculate_total_amount(in_room_rate DECIMAL(10, 2), in_duration INT) RETURNS ...	1 00:15:28		0 row(s) affected	0.047 sec
- Information:** Shows the column **booking_id**.
- SQL Additions:** A note stating: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

MySQL Workbench

HDMS_Demo (hotel_database) x HDMS_Demo (hotel_database) x

File Edit View Query Database Server Tools Scripting Help

SQl

Navigator:

SCHEMAS

Filter objects

hotel_database

- Tables
 - addresses
 - bookings
 - Columns
 - booking_id
 - booking_date
 - duration_of_
 - check_in_dat
 - check_out_da
 - booking_pay
 - total_rooms_
 - hotel_hotel_i
 - guests_gues
 - employees_e
 - total_amount
 - Indexes
 - Foreign Keys
 - Triggers
 - department
 - employees
 - guests
 - hotel

Administration Schemas

Information

Column: booking_id

Definition: booking_id int PK

Query 1 x

1 • SET @room_rate := 100.00;
2 • SET @duration := 5;
3
4 • SELECT calculate_total_amount(@room_rate, @duration) AS total_amount;
5

Result Grid | Filter Rows: Export: Wrap Cell Content: Result Grid

total_amount
500.00

Result 16 x

Action Output

#	Time	Action	Message	Duration / Fetch
1	00:15:28	CREATE FUNCTION calculate_total_amount(in_room_rate DECIMAL(10, 2), in_duration INT) RETURNS ...	0 row(s) affected	0.047 sec
2	00:16:40	SET @room_rate := 100.00	0 row(s) affected	0.015 sec
3	00:16:40	SET @duration := 5	0 row(s) affected	0.000 sec
4	00:16:40	SELECT calculate_total_amount(@room_rate, @duration) AS total_amount LIMIT 0, 1000	1 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

SQLAdditions: Jump to

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

PL/SQL Cursors and Exceptional Handling

PL/SQL Cursors

Procedure with Cursor to calculate total amount spent by Guests

The screenshot shows the MySQL Workbench interface with the following details:

- Schemas:** hotel_database
- Tables:** addresses, bookings, columns, indexes, foreign keys, triggers, department, employees, guests, hotel, hotel_chain, hotel_chain_has_hot, hotel_services, hotel_services_used, room_rate_discount, room_type, rooms.
- Query Editor (Query 1):** Contains the PL/SQL code for the procedure.
- Output:** Shows the execution results of the CREATE PROCEDURE command.
- Message:** A note stating "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

```
DELIMITER //\nCREATE PROCEDURE calculate_total_spent()\nBEGIN\n    DECLARE total DECIMAL(10, 2) DEFAULT 0.00;\n    DECLARE done INT DEFAULT 0;\n    DECLARE guest_id INT;\n    DECLARE amount DECIMAL(10, 2);\n    -- Declare cursor\n    DECLARE guest_cursor CURSOR FOR\n        SELECT guests_guest_id, total_amount FROM bookings;\n    -- Declare continue handler\n    DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;\n    OPEN guest_cursor;\n    guest_loop: LOOP\n        FETCH guest_cursor INTO guest_id, amount;\n        IF done THEN\n            LEAVE guest_loop;\n        END IF;\n        -- Calculate total spent\n        SET total = total + amount;\n    END LOOP;\n    CLOSE guest_cursor;\n    SELECT total AS total_spent;\nEND;\n//\nDELIMITER ;
```

#	Time	Action	Message	Duration / Fetch
1	00:46:00	CREATE PROCEDURE calculate_total_spent()	BEGIN DECLARE total DECIMAL(10, 2) DEFAULT 0.00; D... 0 row(s) affected	0.031 sec

MySQL Workbench

HDMS_Demo (hotel_database) x HDMS_Demo (hotel_database) x

File Edit View Query Database Server Tools Scripting Help

Schemas

Filter objects

hotel_database

- Tables
 - addresses
 - bookings
 - Columns
 - Indexes
 - Foreign Keys
 - Triggers
 - department
 - employees
 - guests
 - Columns
 - Indexes
 - Foreign Keys
 - Triggers
 - hotel
 - hotel_chain
 - hotel_chain_has_hot
 - hotel_services
 - hotel_services_used
 - room_rate_discount
 - room_type
 - rooms

Administration Schemas

Information

Table: employees

Columns:

- emp_id
- emp_first_name
- emp_last_name
- emp_designation
- emp_contact_number
- emp_email_address
- department_department
- addresses_address_id
- hotel_hotel_id

Query 1 x

Limit to 1000 rows

1 • CALL calculate_total_spent();
2

Result Grid | Filter Rows: Export: Wrap Cell Content: Result Grid

total_spent
11810.00

Form Editor

Result 46 x

Action Output

#	Time	Action	Message	Duration / Fetch
25	00:42:35	CALL get_employee_first_names()	1 row(s) returned	- / 0.000 sec
26	00:43:36	CREATE PROCEDURE calculate_total_spent() BEGIN DECLARE total DECIMAL(10, 2) DEFAULT 0.00; ... 0 row(s) affected		0.031 sec
27	00:43:43	CALL calculate_total_spent()	1 row(s) returned	0.000 sec / 0.000 sec

SQLAdditions: Jump to

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

1 29°C ENG 12:43 AM

PL/SQL Exceptions

Exception for Duplicate Data Entry

The screenshot shows the Oracle SQL Developer interface with a query editor window titled "Query 1". The code in the editor is a PL/SQL procedure named "insert_room_type" that handles duplicate data entries. It uses three exit handlers for specific error conditions: "duplicate_entry" (for 23000), "any_error" (for 45000), and "unknown_error" (for 1014). Each handler performs a rollback and displays an error message. The procedure then inserts a new row into the "room_type" table, ignoring the primary key constraint by not specifying the primary key column in the insert statement. The output pane shows the successful creation of the procedure.

```
1  DELIMITER /  
2  CREATE PROCEDURE insert_room_type (  
3      in_room_type_name VARCHAR(45),  
4      in_room_cost DECIMAL(10, 2),  
5      in_room_type_description VARCHAR(100),  
6      in_smoke_friendly TINYINT,  
7      in_pet_friendly TINYINT  
8  )  
9  BEGIN  
10     DECLARE duplicate_entry CONDITION FOR SQLSTATE '23000';  
11     DECLARE any_error CONDITION FOR SQLSTATE '45000';  
12     DECLARE unknown_error CONDITION FOR SQLSTATE '1014';  
13     DECLARE EXIT HANDLER FOR duplicate_entry  
14     BEGIN  
15         ROLLBACK;  
16         SELECT 'Error: Duplicate entry. Room type already exists.' AS Message;  
17     END;  
18     DECLARE CONTINUE HANDLER FOR any_error  
19     BEGIN  
20         ROLLBACK;  
21         SELECT 'Error: Any error occurred.' AS Message;  
22     END;  
23     DECLARE CONTINUE HANDLER FOR unknown_error  
24     BEGIN  
25         ROLLBACK;  
26         SELECT 'Error: Unknown error occurred.' AS Message;  
27     END;  
28     START TRANSACTION;  
29     -- Insert into table excluding room_type_id (auto-incremented primary key)  
30     INSERT INTO room_type (room_type_name, room_cost, room_type_description, smoke_friendly, pet_friendly)  
31     VALUES (in_room_type_name, in_room_cost, in_room_type_description, in_smoke_friendly, in_pet_friendly);  
32     COMMIT;  
33     SELECT 'Room type inserted successfully.' AS Message;  
34   END;  
35  //36  DELIMITER ;  
37
```

Output:

Action Output	#	Time	Action	Message	Duration / Fetch
	1	01:13:43	CREATE PROCEDURE insert_room_type (in_room_type_name VARCHAR(45), in_room_cost DECIMAL(10,...	0 row(s) affected	0.015 sec

MySQL Workbench

HDMS_Demo (hotel_database) x HDMS_Demo (hotel_database) x

File Edit View Query Database Server Tools Scripting Help

Schemas

Filter objects

- bookings
- Columns
- Indexes
- Foreign Keys
- Triggers
- department
- employees
- guests
- Columns
- Indexes
- Foreign Keys
- Triggers
- hotel
- hotel_chain
- Columns
- Indexes
- Foreign Keys
- Triggers
- hotel_chain_has_hot
- hotel_services
- hotel_services_used
- room_rate_discount
- room type

Administration Schemas

Information

:: room_type

mns:

room_type_id	int PK
room_type_name	varchar(45)
room_cost	decimal(10,2)
room_type_description	varchar(100)
oke_friendly	tinyint(1)
t_friendly	tinyint(1)

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Result Grid | Form Editor

Result 78 x Result 79 | Read Only | Context Help | Snippets

Action Output

#	Time	Action	Message	Duration / Fetch
9	01:17:24	CALL insert_room_type('Standard Room', 103.00, '1 King Bed 323-sqfoot (30-sq-meter) room with city views', 0, 1);	1 row(s) returned	0.000 sec / 0.000 sec
10	01:17:24	CALL insert_room_type('Standard Room', 103.00, '1 King Bed 323-sqfoot (30-sq-meter) room with city views', 0, 1);	1 row(s) returned	- / 0.000 sec

Object Info Session

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.



A large, abstract geometric pattern composed of numerous white and light grey triangles of varying sizes, creating a sense of depth and perspective.

THANK YOU