

Database Design Project

Oracle Baseball League Store Database

Project Scenario:

You are a small consulting company specializing in database development. You have just been awarded the contract to develop a data model for a database application system for a small retail store called Oracle Baseball League (OBL).

The Oracle Baseball League store serves the entire surrounding community selling baseball kit. The OBL has two types of customer, there are individuals who purchase items like balls, cleats, gloves, shirts, screen printed t-shirts, and shorts. Additionally customers can represent a team when they purchase uniforms and equipment on behalf of the team.

Teams and individual customers are free to purchase any item from the inventory list, but teams get a discount on the list price depending on the number of players. When a customer places an order we record the order items for that order in our database.

OBL has a team of three sales representatives that officially only call on teams but have been known to handle individual customer complaints.

Section 6 Lesson 4 Exercise 2: Data Manipulation Language

Use DML operations to manage database tables (S6L4 Objective 2)

In this exercise you will populate and work with the data that is stored in the database system.

Part 1- Updating rows to the system

1. Run the following query to view the content of the price_history table:

```
SELECT start_date, TO_CHAR (start_time, 'HH24:MI:SS'), price, end_date, TO_CHAR  
(end_time, 'HH24:MI:SS')  
FROM price_history;
```

2. Obl is going to update the price of the premium bat so you will need to write a query that will close off the current price by adding the system date values to the end_date and end_time fields. To run this query you will need to both match the item number and identify that the end date is null. This ensures that you are updating the latest price.
3. Rerun the select statement on the price_history table to ensure that the statement has been executed.
4. Insert a new row that will use the current date and time to set the new price of the premium bat to be 99.99.
5. Rerun the select statement on the price_history table to ensure that the statement has been executed.

Part 2: Deleting rows from the system

1. Bob Thornberry has contacted Obl to ask that the 83 Barrhill Drive address be removed from the system as he can no longer receive parcels at this address. Write a SQL statement that will remove this address from the system.
2. Run a select statement on the customers_addresses table to ensure that the statement has been executed.

Part 1- Updating rows to the system

1. Run the following query to view the content of the price_history table:

```
SELECT start_date, TO_CHAR (start_time, 'HH24:MI:SS'), price, end_date, TO_CHAR  
(end_time, 'HH24:MI')  
FROM price_history;
```

START_DATE	TO_CHAR(START_TIME, 'HH24:MI:SS')	PRICE	END_DATE	TO_CHAR(END_TIME, 'HH24:MI')
17-JUN-17	09:00:00	4.99	–	–
25-NOV-16	09:00:00	14.99	25-JAN-17	17:00
25-JAN-17	17:01:00	8.99	25-JAN-17	19:00
26-JAN-17	09:00:00	15.99	–	–
12-FEB-17	12:30:00	7.99	–	–
25-APR-17	10:10:10	24.99	–	–
31-MAY-17	16:35:30	149	–	–

2. Obl is going to update the price of the premium bat so you will need to write a query that will close off the current price by adding the system date values to the end_date and end_time fields. To run this query you will need to both match the item number and identify that the end date is null. This ensures that you are updating the latest price.

```
UPDATE price_history  
SET end_date = SYSDATE ,  
    end_time = SYSTIMESTAMP  
WHERE itm_number = 'im01101048'  
AND end_date IS NULL
```

3. Rerun the select statement on the price_history table to ensure that the statement has been executed.

START_DATE	START_TIME	END_DATE	END_TIME	PRICE	ITM_NUMBER
17-JUN-17	17-JUN-16 09.00.00.000000 AM	–	–	4.99	im01101044
25-NOV-16	25-NOV-16 09.00.00.000000 AM	25-JAN-17	25-JAN-17 05.00.00.000000 PM	14.99	im01101045
25-JAN-17	25-JAN-17 05.01.00.000000 PM	25-JAN-17	25-JAN-17 07.00.00.000000 PM	8.99	im01101045
26-JAN-17	26-JAN-17 09.00.00.000000 AM	–	–	15.99	im01101045
12-FEB-17	12-FEB-17 12.30.00.000000 PM	–	–	7.99	im01101046
25-APR-17	25-APR-17 10.10.10.000000 AM	–	–	24.99	im01101047
31-MAY-17	31-MAY-17 04.35.30.000000 PM	09-NOV-23	09-NOV-23 11.07.36.703946 AM	149	im01101048

4. Insert a new row that will use the current date and time to set the new price of the premium bat to be 99.99.

```
INSERT INTO PRICE_HISTORY  
VALUES(SYSDATE, SYSTIMESTAMP, SYSDATE, SYSTIMESTAMP, 99.99, 'im01101048')
```

5. Rerun the select statement on the price_history table to ensure that the statement has been executed.

START_DATE	START_TIME	END_DATE	END_TIME	PRICE	ITM_NUMBER
10-NOV-23	10-NOV-23 01.47.20.821685 AM	10-NOV-23	10-NOV-23 01.47.20.821685 AM	99.99	im01101048
17-JUN-17	17-JUN-16 09.00.00.000000 AM	–	–	4.99	im01101044
25-NOV-16	25-NOV-16 09.00.00.000000 AM	25-JAN-17	25-JAN-17 05.00.00.000000 PM	14.99	im01101045
25-JAN-17	25-JAN-17 05.01.00.000000 PM	25-JAN-17	25-JAN-17 07.00.00.000000 PM	8.99	im01101045
26-JAN-17	26-JAN-17 09.00.00.000000 AM	–	–	15.99	im01101045
12-FEB-17	12-FEB-17 12.30.00.000000 PM	–	–	7.99	im01101046
25-APR-17	25-APR-17 10.10.10.000000 AM	–	–	24.99	im01101047
31-MAY-17	31-MAY-17 04.35.30.000000 PM	09-NOV-23	09-NOV-23 04.26.57.465796 PM	149	im01101048

Part 2: Deleting rows from the system

1. Bob Thornberry has contacted Obl to ask that the 83 Barrhill Drive address be removed from the system as he can longer receive parcels at this address. Write a SQL statement that will remove this address from the system.

```
DELETE FROM customer_addresses  
WHERE ADDRESS_LINE_1 = '83  
Barhill Drive';
```