

## 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;
```

### SQL Worksheet

```
1 SELECT start_date, TO_CHAR (start_time, 'HH24:MI:SS'), price, end_date, TO_CHAR (end_time, 'HH24:MI')  
2 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	-	-

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7 rows selected.

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 = SYSDATE  
WHERE itm_number = 'im01101048' AND end_date IS NULL;
```

### SQL Worksheet

```
1 UPDATE price_history  
2 SET end_date = SYSDATE,  
3   end_time = SYSDATE  
4 WHERE itm_number = 'im01101048' AND end_date IS NULL;
```

1 row(s) updated.

3. Rerun the select statement on the price\_history table to ensure that the statement has been executed.

SQL Worksheet

ClearFindActionsSave

1 SELECT start\_date, TO\_CHAR (start\_time, 'HH24:MI:SS'), price, end\_date, TO\_CHAR (end\_time, 'HH24:MI')

2 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	09-NOV-23	15:30

Download CSV

7 rows selected.

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 (start_date, start_time, price, itm_number)
VALUES (SYSDATE, SYSDATE, 99.99, 'im01101048');
```

SQL Worksheet

Clear

1 INSERT INTO price\_history (start\_date, start\_time, price, itm\_number)

2 VALUES (SYSDATE, SYSDATE, 99.99, 'im01101048');

1 row(s) inserted.

5. Rerun the select statement on the price\_history table to ensure that the statement has been executed.

SQL Worksheet

Clear

Find

Actions

Save

1 SELECT start\_date, TO\_CHAR (start\_time, 'HH24:MI:SS'), price, end\_date, TO\_CHAR (end\_time, 'HH24:MI')

2 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	09-NOV-23	15:30
09-NOV-23	15:44:50	99.99	-	-

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## 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.

```
DELETE FROM customers_addresses  
WHERE address_line_1 = '83 Barrhill Drive';
```

### SQL Worksheet

```
1 v DELETE FROM customers_addresses  
2 WHERE address_line_1 = '83 Barrhill Drive';
```

1 row(s) deleted.

2. Run a select statement on the customers\_addresses table to ensure that the statement has been executed.

```
select * from customers_addresses;
```

### SQL Worksheet

Clear Find A

```
1 select * from customers_addresses;
```

ID	ADDRESS_LINE_1	ADDRESS_LINE_2	CITY	ZIP_CODE	CTR_NUMBER
ca0102	17 Gartsquare Road	Starford	Liverpool	LP89JHK	c00001
ca0103	54 Ropehill Crescent	Georgetown	Star	ST45AGV	c00101
ca0104	36 Watercress Lane	-	Jump	JP23YTH	c01986
ca0105	63 Acacia Drive	Skins	Liverpool	LP83JHR	c00001

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4 rows selected.