

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;
```

The screenshot shows the Oracle APEX SQL Workshop interface. The 'Object Browser' on the left lists various database objects, with 'PRICE_HISTORY' highlighted under the 'Tables' section. The main panel displays the 'PRICE_HISTORY' table in 'Data' view. The table has columns: START_DATE, START_TIME, PRICE, END_DATE, END_TIME, and ITM_NUMBER. The data is as follows:

START_DATE	START_TIME	PRICE	END_DATE	END_TIME	ITM_NUMBER
06/17/2017	06/17/2016	4.99			im01101044
11/25/2016	11/25/2016	14.99	01/25/2017	01/25/2017	im01101045
01/25/2017	01/25/2017	8.99	01/25/2017	01/25/2017	im01101045
01/26/2017	01/26/2017	15.99			im01101045
02/12/2017	02/12/2017	7.99			im01101046
04/25/2017	04/25/2017	24.99			im01101047
05/31/2017	05/31/2017	14.9			im01101048

The interface also shows a search bar, a schema dropdown set to 'WKSP_NDAYAH15', and a bottom status bar indicating '1 cells selected' and 'Oracle APEX 23.2.0-20'.

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.

APEX App Builder SQL Workshop Team Development Gallery

Search

Nur Hidayah ndayah15

SQL Commands Schema WKSP_NDAYAH15

Language SQL Rows 10 Clear Command Find Tables Save Run

```

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

```

Results Explain Describe Saved SQL History

1 row(s) updated.

0.03 seconds

nrhidayah2003@gmail.com ndayah15 en Copyright © 1999, 2023, Oracle and/or its affiliates. Oracle APEX 23.2.0-20

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

APEX App Builder SQL Workshop Team Development Gallery

Search

Nur Hidayah ndayah15

SQL Commands Schema WKSP_NDAYAH15

Language SQL Rows 10 Clear Command Find Tables Save Run

```

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

```

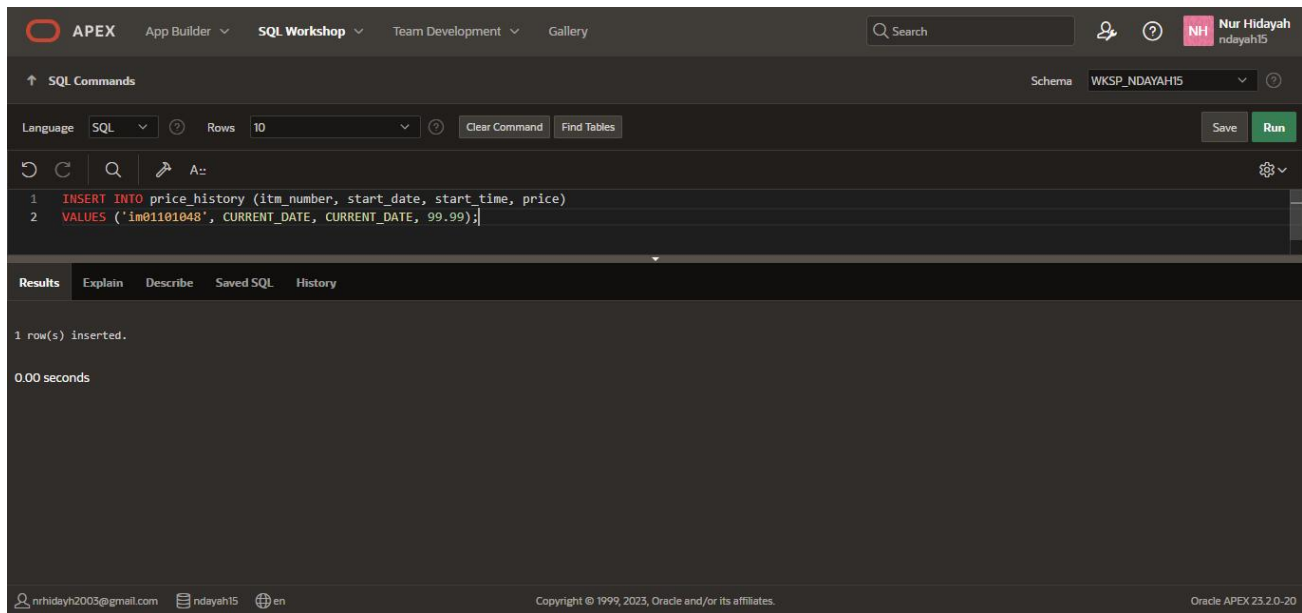
Results Explain Describe Saved SQL History

START_DATE	TO_CHAR(START_TIME,'HH24:MI:SS')	PRICE	END_DATE	TO_CHAR(END_TIME,'HH24:MI')
06/17/2017	09:00:00	4.99	-	-
11/25/2016	09:00:00	14.99	01/25/2017	17:00
01/25/2017	17:01:00	8.99	01/25/2017	19:00
01/26/2017	09:00:00	15.99	-	-
02/12/2017	12:30:00	7.99	-	-
04/25/2017	10:10:10	24.99	-	-
05/31/2017	16:35:30	149	11/10/2023	15:37

7 rows returned in 0.01 seconds Download

nrhidayah2003@gmail.com ndayah15 en Copyright © 1999, 2023, Oracle and/or its affiliates. Oracle APEX 23.2.0-20

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.

The screenshot shows the Oracle APEX SQL Workshop interface with the same navigation bar as the previous image. The SQL command being executed is:

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

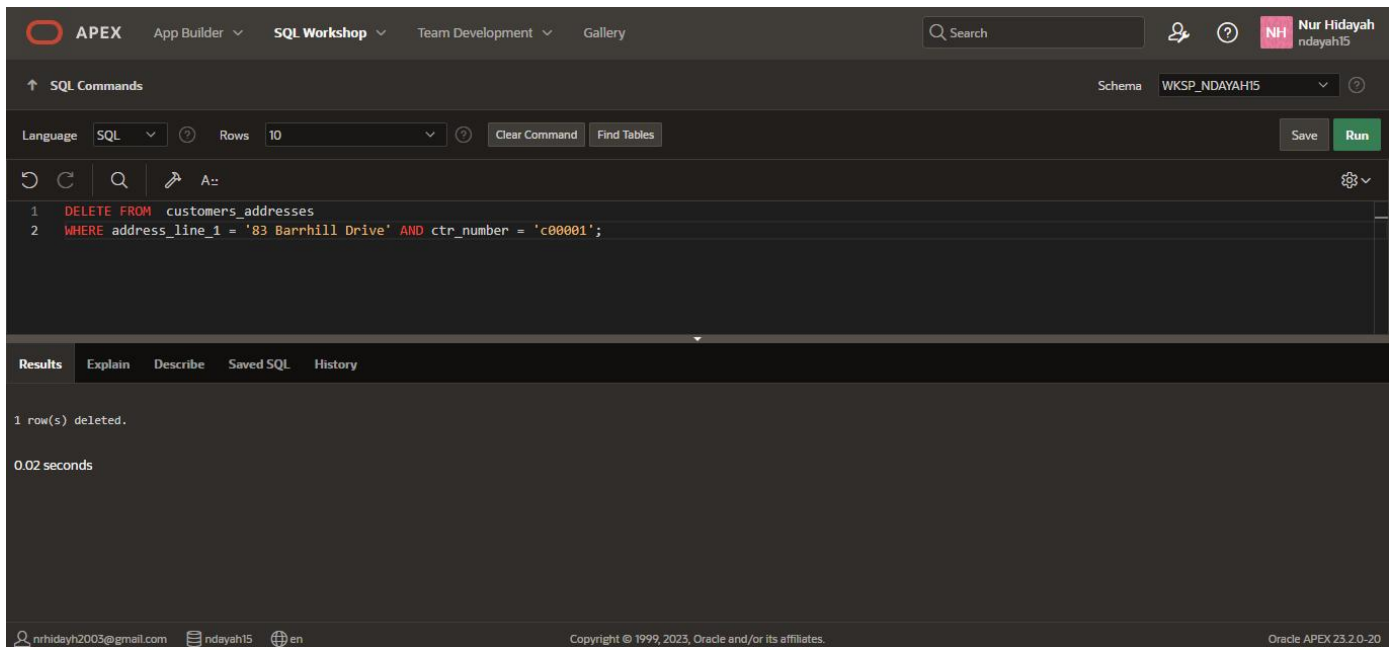
The results section shows a table with 9 rows returned in 0.01 seconds. The table has the following columns: START_DATE, TO_CHAR(START_TIME, 'HH24:MI:SS'), PRICE, END_DATE, and TO_CHAR(END_TIME, 'HH24:MI').

START_DATE	TO_CHAR(START_TIME, 'HH24:MI:SS')	PRICE	END_DATE	TO_CHAR(END_TIME, 'HH24:MI')
11/10/2023	15:43:49	99.99	-	-
06/17/2017	09:00:00	4.99	-	-
11/25/2016	09:00:00	14.99	01/25/2017	17:00
01/25/2017	17:01:00	8.99	01/25/2017	19:00
01/26/2017	09:00:00	15.99	-	-
02/12/2017	12:30:00	7.99	-	-
04/25/2017	10:10:10	24.99	-	-
05/31/2017	16:35:30	149	11/10/2023	15:37

The bottom status bar includes the user's email 'nrhdayh2003@gmail.com', the username 'ndayah15', and the Oracle APEX version '23.2.0-20'.

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.

