COMM1822

Term 2 2022

Introduction to Databases for Business Analytics

Week 9
Subqueries and Merge Statement
Big Data

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We acknowledge all Aboriginal and Torres St~~rait~~ Islander Elders, past and present and thei~~r~~ communities who have shared and practiced their teachings over thousands of years including business practices.

We recognise Aboriginal and Torres Strait Islander people's ongoing leadership and contributions, including to business, education and industry.

UNSW Business School. (2022, May 7). *Acknowledgement of Country* [online video]. Retrieved from https://vimeo.com/369229957/d995d8087f

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COMM1822 Consultation

What	Who	When	How
Consultation with the LiC	Kam-Fung Cheung	(ST)	Send an email to book a time: kf.cheung@unsw.edu.au

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COMM1822 PASS Class

What	Who	When	How
PASS Class	Srilekha Kolaki		Online via https://au.bbcollab.com/guest/734c90ddf42d2868fc2304b801d82
			s.kolaki@student.unsw.edu.au

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Agenda

❑ **MyExperience**

❑ Discussion of Subqueries and Merge Statements

❑ Week 9 Sandbox Acti

❑ Big Data Strategy

MyExperience

Our aim is **80%** response rate!

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Please fil urvey now!

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https://web.microsoftstream.com/video/48a 4b84-89c7-80dff76e6db5

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Thank you for being so patient with us and we look forward to your feedback.

myExperience

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Agenda

❑ MyExperience

❑ Discussion of Subqueries and Merge Statements

❑ Week 9 Sandbox A

❑ Big Data Strategy

Week 9 Lab Manual Discussion

1. What is the purpose of subqueries and how might they be useful?

2. What are the differ   ies?

3. What new concept has been int

4. What new clauses have been introduced?

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Agenda

❑ MyExperience

❑ Discussion of Subqueries and Merge Statements

❑ **Week 9 Sandbox**

❑ Big Data Strategy

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Week 9 Sandbox Activity

1. Determine which other customer visited the restaurant on the same day as David Nguyen.

2. Determine which foo   preparation time than Ox Tongue.

3. Determine which food items cost l   e most frequently ordered drink item. Display the name of the dish and the price.

4. List each chef's name, and the average price of all items ordered that each chef prepares (per day).

Week 9 Sandbox Activity

1. Determine which other customer visited the restaurant on the same day as David Nguyen.

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```sql
SELECT DISTINCT c.name
FROM CUSTOMER c
INNER JOIN ORDERS o
USING (customer_id)
WHERE order_date =
        (SELECT order_date FROM ORDERS WHERE c
                (SELECT customer_id FROM CUSTOMER where name = 'David Nguyen')
        )
AND c.name <> 'David Nguyen';
```

Week 9 Sandbox Activity

2. Determine which food items have a longer preparation time than Ox Tongue.

```
SELECT *
FROM FOOD
WHERE cook_time >
        (SELECT cook_time FROM ... Tongue)
```

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Week 9 Sandbox Activity

3. Determine which food items cost less than the most frequently ordered drink item. Display the name of the dish and the price.

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SELECT * FROM FOOD
WHERE price <
(

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        SELECT d.price
        FROM DRINKS d INNER JOIN ORDERS o that edu_assist_pro
        GROUP BY d.drink_id, d.drink_name, d.price
        ORDER BY count(*) DESC
        FETCH FIRST 1 ROWS ONLY -- Can be done alternatively using more subqueries to get the
maximum count, then join back
);

Week 9 Sandbox Activity

4. List each chef's name, and the average price of all items ordered that each chef prepares (per day).

```sql
SELECT c.name, TO_CHAR(av.average_revenue, '$99.99') "Average Daily Revenue"
FROM CHEF c
INNER JOIN
(
    SELECT staff_id, AVG(daily_reve
    (SELECT c.staff_id, o.order_date,                    e)/100.0) daily_revenue
    FROM orders o INNER JOIN disc
    ON o.discount_id = d.discount_id
    INNER JOIN food f
    ON o.food_id = f.food_id
    INNER JOIN cooks c
    ON f.food_id = c.food_id
    GROUP BY c.staff_id, o.order_date)
    GROUP BY staff_id
)
av ON c.staff_id = av.staff_id;
```

Online Safety - Break

- Rest Breaks: https://safety.unsw.edu.au/office-safety-toolkit/rest-breaks
- WorkRave at UNSW: https://safety.unsw.edu.au/sites/default/files/documents/UNSW_WorkRave_V1.0.pdf
- Setting up you Workstatioedu.au/setting-your-workstation-video
- Online Safety and Wellbeing Tutorial: httt.unsw.edu.au/safety
- SafeWork 6 Simple stretches: https://wrk.nsw.gov.au/resource-library/six-simple-stretches

Break

Ta eak

Agenda

❑ MyExperience

❑ Discussion of Subqueries and Merge Statements

❑ Week 9 Sandbox A

❑ **Big Data Strategy**

Big Data Strategy (Discussion)

1. Research a company of your choice (different from last week's company if possible)
2. Build a Big Data strategy using the **5 steps of the Enterprise Big Data Framework**: https://w _____ rg/formulating-a-big-data-strategy/
3. Focus in this discussion on the chall Big Data project would face, i.e., the three interdependent c that cause success or failure: **People**, **Process** and **Technology**

    See next slide
    30 min in breakout rooms/groups
    Present your work in groups (3 min per group)

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