

Query 1

SELECT

```
i.UserID AS Instructor,  
i.MentoredBy,  
u1.Name AS InstructorName,  
u2.Name AS MentorName
```

FROM

```
Instructor i  
LEFT JOIN User u1 ON i.UserID = u1.UserID  
LEFT JOIN Instructor m ON i.MentoredBy = m.UserID  
LEFT JOIN User u2 ON m.UserID = u2.UserID;
```

Instructor	MentoredBy	InstructorName	MentorName
2	NULL	Benjamin Lee	NULL
8	NULL	Daniel Koh	NULL
10	NULL	Samuel Ong	NULL
12	NULL	Clarence Sim	NULL
16	NULL	Vincent Chong	NULL
18	NULL	Jonathan Sim	NULL
25	NULL	Ridhwan Ackerman	NULL
26	NULL	Hans Isaac	NULL
27	2	Rampa Ragustan	Benjamin Lee
28	8	Timothy Ching	Daniel Koh
29	10	Jane Chang	Samuel Ong

User

Human Resources Department

Query Action

Craft a list detailing who the instructors and their mentees are. State the Instructor (mentee), who the instructor was Mentored By, the Instructor (mentee) Name, and the Mentor Name. Introduce efficient organisation of all assignments of mentor-mentees.

Value-Add

Resource Allocation and Planning

Assists in workload management and scheduling

- Adjust class schedules or provide additional support to mentors with many mentees
- Ensure there are no clashes that arise with each new mentee

Value Add: Recognizing and Rewarding Mentors

Acknowledging mentors' efforts can boost morale, encourage experienced instructors to continue supporting new hires, and foster a positive work culture.

Query 2

* Assume current date is 2024-06-20

```
SELECT
  u.UserID,
  u.Name AS CustomerName,
  u.Email,
  u.Phone,
  p.PackageDuration,
  py.PaymentDate,
  'Yes' AS SendCollateral
FROM
  User u
  JOIN Customer c ON u.UserID = c.UserID
  JOIN Payment py ON u.UserID = py.UserID
  JOIN Package p ON py.PackageID = p.PackageID
WHERE
  u.UserType = 'Customer'
  AND DATE_ADD(py.PaymentDate,
    INTERVAL CASE
      WHEN p.PackageDuration LIKE '%Day%' THEN CAST(REPLACE(p.PackageDuration, ' Day', '') AS UNSIGNED)
      WHEN p.PackageDuration LIKE '%Week%' THEN CAST(REPLACE(p.PackageDuration, ' Week', '') AS UNSIGNED) * 7
      WHEN p.PackageDuration LIKE '%Month%' THEN CAST(REPLACE(p.PackageDuration, ' Month', '') AS UNSIGNED) * 30
    END DAY)
  BETWEEN '2024-06-20' AND '2024-06-27';
```

UserID	CustomerName	Email	Phone	PackageDuration	PaymentDate	SendCollateral
1	Evelyn Ong	evelyn.ong@gmail.com	6598231098	3 Months	2024-03-25	Yes

User

Marketing Team

Query Action

- Identify customers with packages expiring in the next 7 days.
- List the User ID, the Customer's Name, Email, Phone, Package Duration and Payment Date, and whether the marketing team needs to send out collateral
- Know which customers to send out marketing/retargeting messaging to notify and encourage more purchases

Value-Add

Increased revenue and customer retention

- Increase the chance of renewals and potential upselling by reaching out to customers whose packages are expiring
- Capitalising right before their package lapses creates the opportunity to upsell more advanced, longer packages
- This could lead to increased revenue and improved customer retention

```

SELECT
    u.UserID AS CustomerID,
    u.Name AS CustomerName,
    c.ClassName,
    COUNT(DISTINCT c.ClassID) AS ClassesTaken
FROM
    User u
JOIN
    Booking_Record br ON U.UserID = br.UserID
JOIN
    Class c ON br.ClassID = c.ClassID
WHERE
    u.UserType = 'Customer'
    AND c.Date < '2024-06-20' -- Only count past classes
GROUP BY
    u.UserID, c.ClassName
ORDER BY
    CustomerName, ClassesTaken DESC;

```

CustomerID	CustomerName	ClassName	ClassesTaken
19	Adeline Goh	Reformer Pilates Level 3	1
6	Alexander Chua	Spin Class Basics	2
6	Alexander Chua	Mat Pilates Basics	2
6	Alexander Chua	Spin Class Level 2	1
30	Bobby Tan	Spin Class Basics	2
30	Bobby Tan	Spin Class Level 3	1
30	Bobby Tan	Spin Class Level 2	1
30	Bobby Tan	Reformer Pilates Level 3	1
3	Catherine Ng	Spin Class Basics	1
9	Esther Loh	Mat Pilates Basics	2

User

Customer & Marketing Team

Query Action

- List all the types and number of classes a customer has taken before.
- List the Customer ID and Name, and Class Name of all the Classes each customer has Taken before.
- Helps customers track the number and type of lessons booked against their own records, for their financial tracking purposes or otherwise.

Value-Add

Goal Setting and Continuity (Customer)

- Providing a tangible record of their class history and progress can boost customer engagement and satisfaction, and foster a deeper connection between them and our services
- Overall, it can encourage goal-setting and continuity

Personalised Recommendations and Upselling (Marketing Team)

Personalised suggestions can be implemented when the company understands each customer's activity history.

- e.g., if a customer attended multiple 'basic Spin classes', we could recommend 'Level 1 Spin Classes'
- This adds value to their experience and encourages additional, future purchases.

Query 3

Query 4

SELECT

```
u.UserID,  
u.Name AS CustomerName,  
u.Email,  
br.ClassID,  
c.ClassName,  
c.Date AS ClassDate,  
c.StartTime,  
c.EndTime
```

FROM

```
Booking_Record br
```

JOIN

```
User u ON br.UserID = u.UserID
```

JOIN

```
Class c ON br.ClassID = c.ClassID
```

WHERE

```
u.UserType = 'Customer'  
AND c.Date >= '2024-06-01'  
AND c.Date <= '2024-06-30'
```

ORDER BY

```
c.Date, c.StartTime;
```

User

ICustomer Management Team & Marketing Team

Query Action

- Given a specified time period, identify customers who have booked classes
- List the User ID, Customer Name and Email, Class ID, Name and Date, and the Start and End Time of all the Classes within that specified time period
- To identify customers that will be attending classes within that period and send automatic set notifications to them

Value-Add

Reputation, Revenue and Rapport Building (Customer Management)

- Proactively sending out class notifications to customers boosts the customer experience by increasing convenience
- Strengthens customer relationships by making customers feel attended to
- This leads to overall increase in reputation, rapport and revenue

Better Inventory and Resource Planning (Customer Management)

Understanding booking patterns allows the team to better manage future class sizes, equipment needs, and other resources.

Tracking Customer Engagement Trends (Marketing Team)

The team can identify trends in customer engagement, such as peak booking times

- Prepare targeted campaigns and better resource planning for periods of high demand

UserID	CustomerName	Email	ClassID	ClassName	ClassDate	StartTime	EndTime
1	Evelyn Ong	evelyn.ong@gmail.com	1	Spin Class Basics	2024-06-01	09:00:00	10:00:00
3	Catherine Ng	catherineng2000@outlook.com	1	Spin Class Basics	2024-06-01	09:00:00	10:00:00
15	Isabella Yeo	isabella.yeo2002@outlook.com	1	Spin Class Basics	2024-06-01	09:00:00	10:00:00
22	Joshua Tan	joshua.tan2003@gmail.com	1	Spin Class Basics	2024-06-01	09:00:00	10:00:00
30	Bobby Tan	bobby.tan1991@outlook.com	1	Spin Class Basics	2024-06-01	09:00:00	10:00:00
4	Kevin Ng	kevinng99@hotmail.com	3	Spin Class Level 2	2024-06-01	09:00:00	10:00:00
5	Rebecca Goh	rebecca.goh2010@gmail.com	3	Spin Class Level 2	2024-06-01	09:00:00	10:00:00
6	Alexander Chua	alexander.chua2015@outlook.com	3	Spin Class Level 2	2024-06-01	09:00:00	10:00:00
7	Helen Lim	helen.lim1985@gmail.com	3	Spin Class Level 2	2024-06-01	09:00:00	10:00:00
11	Samantha Seah	samantha.seah1995@outlook.com	3	Spin Class Level 2	2024-06-01	09:00:00	10:00:00
13	Juliana Tan	juliana.tan2001@gmail.com	3	Spin Class Level 2	2024-06-01	09:00:00	10:00:00
1	Evelyn Ong	evelyn.ong@gmail.com	5	Spin Class Level 3	2024-06-01	10:00:00	11:00:00