


<b>Soal Praktikum</b> <i>Practicum Case</i>	
<b>ISYS6028</b> <b>Database Systems</b>	
<b>Teknik Informatika</b> <i>Computer Science</i>	O221-ISYS6028-DW01-07
<b>Periode Berlaku Mulai</b> Semester Ganjil 2021/2022 <b>Valid on</b> <i>Odd Semester Year 2021/2022</i>	<b>Revisi 00</b> <i>Revision 00</i>

### Learning Outcomes

- Apply database language and SQL Programming language

### Topic

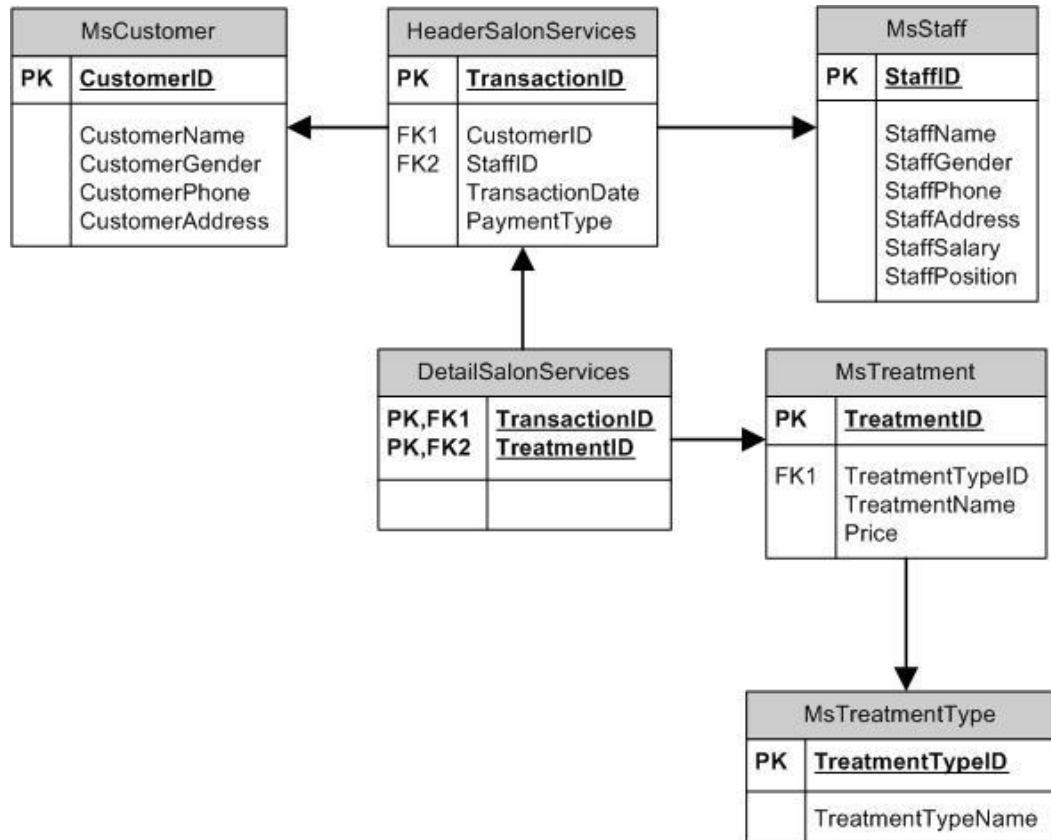
- Session 07 - SQL – Data Manipulation (5)

### Sub Topics

- Subquery
- Alias subquery
- IN & EXISTS
- ANY, SOME, ALL

## Tabel Relasional

Relational Table



**Sintaks***Syntax***Alias****for field name**

```
SELECT { field_name AS field_alias | field_alias = field_name }  
FROM table_name
```

**for table name**

```
SELECT { * | field_name [, ...] }  
FROM table_name [AS] table_alias
```

**for subquery name**

```
( SELECT { * | field_name [, ...] }  
FROM table_name [, ...] )  
[AS] table_alias
```

**In**

```
SELECT { * | field_name [, ...] }  
FROM table_name [, ...]  
WHERE field_name [NOT] IN ( { value1, value2 [, ...] | select_query } )
```

**Exists**

```
SELECT { * | field_name [, ...] }  
FROM table_name [, ...]  
WHERE [NOT] EXISTS (select_query)
```

**All, Any, Some**

```
SELECT { * | field_name [, ...] }  
FROM table_name [, ...]  
WHERE field_name { relational_operator } { ALL | ANY | SOME } ( select_query )
```

**Select Into**

```
SELECT { * | field_name [, ...] }  
INTO new_table [IN external_database]  
FROM source
```

**Soal***Case*

1. Display TreatmentId, and TreatmentName for every treatment which id is 'TM001' or 'TM002'.

**(in)**

	TreatmentId	TreatmentName
1	TM001	Cutting by Stylist
2	TM002	Cutting by Top Stylist

2. Display TreatmentName, and Price for every treatment which type is not 'Hair Treatment' and 'Message / Spa'.

**(in, not in)**

	TreatmentName	Price
1	Make Up	500000.00
2	Make Up Wedding	5000000.00
3	Facial	300000.00
4	Manicure	80000.00
5	Pedicure	100000.00
6	Nail Extension	250000.00
7	Nail Acrylic Infill	340000.00
8	Japanese Treatment	350000.00
9	Scalp Treatment	250000.00
10	Crystal Treatment	400000.00

3. Display CustomerName, CustomerPhone, and CustomerAddress for every customer whose name is more than 8 charactes and did transaction on Friday.

**(len, in, datetime, weekday)**

	CustomerName	CustomerPhone	CustomerAddress
1	Andy Putra	087751321421	Sunter Street no 42

4. Display TreatmentTypeName, TreatmentName, and Price for every treatment that taken by customer whose name contains 'Putra' and happened on day 22<sup>th</sup>.

**(in, like, day)**

	TreatmentTypeName	TreatmentName	Price
1	Hair Treatment	Coloring	480000.00
2	Hair Treatment	Highlight	320000.00

5. Display StaffName, CustomerName, and TransactionDate (obtained from TransactionDate in 'Mon dd,yyyy' format) for every treatment which the last character of treatmentid is an even number.

**(convert, exists, right)**

	StaffName	CustomerName	TransactionDate
1	Dian Felita Tanoto	Emalia Dewi	Dec 22, 2012
2	Mellisa Pratiwi	Elysia Chen	Dec 22, 2012
3	Livia Ashianti	Andy Putra	Dec 21, 2012
4	Indra Saswita	Andy Putra	Dec 22, 2012
5	Ryan Nixon Salim	Emalia Dewi	Dec 20, 2012
6	Ryan Nixon Salim	Brando Kartawijaya	Dec 20, 2012
7	Ryan Nixon Salim	Franky	Dec 21, 2012

6. Display CustomerName, CustomerPhone, and CustomerAddress for every customer that was served by staff whose name's length is an odd number.  
(exists, len)

	CustomerName	CustomerPhone	CustomerAddress
1	Franky	08566543338	Daan mogot baru Street no 6
2	Elysia Chen	085754206611	Kebon Jeruk Street no 120
3	Andy Putra	087751321421	Sunter Street no 42

7. Display ID (obtained from last 3 characters of StaffID), and Name (obtained by taking character after the first space until character before second space in StaffName) for every staff whose name contains at least 3 words and hasn't served male customer.  
(right, substring, charindex, len, exists, in, not like, like)

	ID	Name
1	001	Felita
2	005	Nixon

8. Display TreatmentTypeName, TreatmentName, and Price for every treatment which price is higher than average of all treatment's price.  
(alias subquery, avg)

	TreatmentTypeName	TreatmentName	Price
1	Hair Treatment	Japanese Perm	700000.00
2	Hair Treatment	Digital Perm	1100000.00
3	Hair Treatment	Special Perm	1100000.00
4	Hair Treatment	Rebonding Treatment	1100000.00
5	Beauty Care	Make Up Wedding	5000000.00

9. Display StaffName, StaffPosition, and StaffSalary for every staff with highest salary or lowest salary.  
(alias subquery, max, min)

	StaffName	StaffPosition	StaffSalary
1	Dian Felita Tanoto	Top Stylist	15000000.00
2	Ryan Nixon Salim	Stylist	3000000.00

10. Display CustomerName, CustomerPhone, CustomerAddress, and Count Treatment (obtained from the total number of treatment) for every transaction which has the highest total number of treatment.

(alias subquery, group by, max, count)

	CustomerName	CustomerPhone	CustomerAddress	Count Treatment
1	Brando Kartawijaya	081170225561	Greenvil Street no 88	4