

TUGAS 2

SISTEM MANAJEMEN BASIS DATA

Role dan Hak Akses (Grant) di Database **classicmodels**

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A. Pengertian Hak Akses dan Role

Hak akses (grant) adalah kewenangan setiap user untuk melihat data, melakukan edit atau menghapus data yang berada di setiap tabel database. Setiap user pada database umumnya mempunyai hak akses/kewenangan sendiri sendiri, tergantung dengan kondisi di lapangan. Sedangkan role adalah kumpulan hak akses yang akan digunakan untuk user di database, fungsi role hanya untuk mempermudah pemberian hak akses di user lainnya. Rasanya terlalu lama jika harus memberikan hak akses untuk melihat, melakukan edit data pada 1000 user, maka dari itu dibuat role agar mudah dalam pemberian hak akses.

B. Pemberian Role dan Hak Akses di Database **classicmodels**

1. Membuat 3 buah role yaitu **pemilikRetail**, **supervisorManager**, dan **operatorKasir**

```
MariaDB [classicmodels]> CREATE ROLE pemilikRetail, supervisorManager, operatorKasir;  
Query OK, 0 rows affected (0.30 sec)
```

2. Menambahkan hak akses pada setiap role
 - Hak akses select pada semua table di database pada role **pemilikRetail**

```
MariaDB [classicmodels]> GRANT SELECT ON classicmodels.* TO pemilikRetail;  
Query OK, 0 rows affected (0.06 sec)
```

- Hak akses penuh/semua hak akses pada table **offices**, **products**, **employees** di database pada role **supervisorManager**

```
MariaDB [classicmodels]> GRANT ALL ON classicmodels.offices TO supervisorManager;  
Query OK, 0 rows affected (0.03 sec)
```

```
MariaDB [classicmodels]> GRANT ALL ON classicmodels.products TO supervisorManager;  
Query OK, 0 rows affected (0.00 sec)
```

```
MariaDB [classicmodels]> GRANT ALL ON classicmodels.employees TO supervisorManager;  
Query OK, 0 rows affected (0.00 sec)
```

- Hak akses INSERT, dan UPDATE pada table **offices**, **products**, **employees** di database pada role **operatorKasir**

```
MariaDB [classicmodels]> GRANT INSERT, UPDATE ON classicmodels.customers TO operatorKasir;  
Query OK, 0 rows affected (0.02 sec)
```

```
MariaDB [classicmodels]> GRANT INSERT, UPDATE ON classicmodels.payments TO operatorKasir;  
Query OK, 0 rows affected (0.07 sec)
```

```
MariaDB [classicmodels]> GRANT INSERT, UPDATE ON classicmodels.orders TO operatorKasir;  
Query OK, 0 rows affected (0.06 sec)
```

```
MariaDB [classicmodels]> GRANT INSERT, UPDATE ON classicmodels.orderdetails TO operatorKasir;  
Query OK, 0 rows affected (0.05 sec)
```

3. Membuat user account

- User retailDimas di localhost dengan password 'inipassword'. User ini akan berlaku sebagai pemilik retail.

```
MariaDB [classicmodels]> CREATE USER retailDimas@localhost IDENTIFIED BY 'inipassword';  
Query OK, 0 rows affected (0.00 sec)
```

- User managerFadli di localhost dengan password 'inipassword2'. User ini akan berlaku sebagai supervisor manager.

```
MariaDB [classicmodels]> CREATE USER managerFadli@localhost IDENTIFIED BY 'inipassword2';  
Query OK, 0 rows affected (0.00 sec)
```

- User kasirNur di localhost dengan password 'inipassword3'. User ini akan berlaku sebagai operator kasir.

```
MariaDB [classicmodels]> CREATE USER kasirNur@localhost IDENTIFIED BY 'inipassword3';  
Query OK, 0 rows affected (0.00 sec)
```

4. Memberikan hak akses role pada user

```
MariaDB [classicmodels]> GRANT pemilikRetail TO retailDimas@localhost;
Query OK, 0 rows affected (0.00 sec)

MariaDB [classicmodels]> GRANT supervisorManager TO managerFadli@localhost;
Query OK, 0 rows affected (0.00 sec)

MariaDB [classicmodels]> GRANT operatorKasir TO kasirNur@localhost;
Query OK, 0 rows affected (0.00 sec)
```

5. Menampilkan hak akses role dari user

```
MariaDB [classicmodels]> SHOW GRANTS FOR retailDimas@localhost;
+-----+
| Grants for retailDimas@localhost |
+-----+
| GRANT pemilikRetail TO 'retailDimas'@'localhost' |
| GRANT USAGE ON *.* TO 'retailDimas'@'localhost' IDENTIFIED BY PASSWORD '*554EDB82FF31E51F77B3CC |
+-----+
2 rows in set (0.00 sec)

MariaDB [classicmodels]> SHOW GRANTS FOR managerFadli@localhost;
+-----+
| Grants for managerFadli@localhost |
+-----+
| GRANT supervisorManager TO 'managerFadli'@'localhost' |
| GRANT USAGE ON *.* TO 'managerFadli'@'localhost' IDENTIFIED BY PASSWORD '*84E7B4C0081E754DB0A2E |
+-----+
2 rows in set (0.00 sec)

MariaDB [classicmodels]> SHOW GRANTS FOR kasirNur@localhost;
+-----+
| Grants for kasirNur@localhost |
+-----+
| GRANT operatorKasir TO 'kasirNur'@'localhost' |
| GRANT USAGE ON *.* TO 'kasirNur'@'localhost' IDENTIFIED BY PASSWORD '*F83BB5F259672498FF1E6BDAB |
+-----+
2 rows in set (0.00 sec)
```