

A modern conference room with large windows and a long table. The room is empty, with several black office chairs arranged around a long, dark wooden table. The windows offer a view of a cityscape. The image has a blue tint and a stylized, torn-paper-like border.

# Data Control Language (DCL)

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- the GRANT and REVOKE statements

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- the GRANT and REVOKE statements  
allow us to manage the rights users have in a database

# Data Control Language



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- The GRANT statement



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gives (or grants) certain permissions to users

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SQL

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SQL

```
GRANT type_of_permission ON database_name.table_name TO  
'username'@'localhost'
```

# Data Control Language

- The GRANT statement

gives (or grants) certain permissions to users

- one can grant a *specific* type of permission, like *complete* or *partial access*



SQL

```
GRANT type_of_permission ON database_name.table_name TO  
'username'@'localhost'
```

# Data Control Language

- these rights will be assigned to a person who has a *username* registered at the *local server* ('localhost': IP 127.0.0.1)



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```

# Data Control Language

- these rights will be assigned to a person who has a *username* registered at the *local server* ('localhost': IP 127.0.0.1)
- big companies and corporations don't use this type of server, and their databases lay on *external*, more powerful servers



SQL

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GRANT type_of_permission ON database_name.table_name TO  
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# Data Control Language

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people who have *complete* rights to a database



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used to revoke permissions and privileges of database users

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- the REVOKE clause

used to revoke permissions and privileges of database users

- the exact opposite of GRANT

# Data Control Language

- the REVOKE clause  
used to revoke permissions and privileges of database users



SQL

# Data Control Language

- the REVOKE clause

used to revoke permissions and privileges of database users



SQL

```
REVOKE type_of_permission ON database_name.table_name FROM  
'username'@'localhost'
```

# Data Control Language

Next:

# Data Control Language

Next:

Transaction Control Language (TCL)