



Database System

Lecture 7

SQL Sub Languages

DDL - Data Definition Language

TABLE CONSTRAINT

Unique constraint

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SQL Components Or SQL Sub Languages

DCL: Data Control Language

Example: Grant, Revoke.

DDL: Data Definition Language.

Example: Create, Alter, Drop, Rename and Truncate.

DML: Data Manipulation Language

Example: Insert, Update, Delete

DRL: Data Retrieval Language

Example: Select

TCL: Transaction Control Language

Example : Rollback, Commit, Savepoint

DDL - TABLE CONSTRAINT

Types of constraint

- Primary Key Constraint.
- Foreign Key constraint.
- Unique constraint.
- Check Constraint.
- Not NULL Constraint.
- Default Constraint.

DDL - TABLE CONSTRAINT

➤ *UNIQUE Constraint*

What is a unique constraint in Oracle?

A unique constraint is a single field or combination of fields that uniquely defines a record. Some of the fields can contain null values as long as the combination of values is unique.

Note

In Oracle, a unique constraint can not contain more than 32 columns.

A unique constraint can be defined in either a CREATE TABLE statement or an ALTER TABLE statement.

DDL - TABLE CONSTRAINT

Create unique Constraint - Using a CREATE TABLE statement

The syntax for creating a unique constraint using a CREATE TABLE statement is:

```
CREATE TABLE table_name  
(  
  column1 datatype [ NULL | NOT NULL ],  
  column2 datatype [ NULL | NOT NULL ], ...  
  CONSTRAINT constraint_name UNIQUE (uc_col1,  
  uc_col2, ... uc_col_n)  
);
```

DDL - TABLE CONSTRAINT

Create unique Constraint - Using a CREATE TABLE statement

Example

```
CREATE TABLE supplier3  
(  
supplier_id number(10) NOT NULL,  
supplier_name varchar2(50) NOT NULL,  
contact_name varchar2(50),  
Parcode varchar2(30),  
CONSTRAINT parcode_unique UNIQUE (Parcode)  
);
```

DDL - TABLE CONSTRAINT

Create unique constraint - Using an ALTER TABLE statement

The syntax for creating a unique constraint using an ALTER Statement.

```
ALTER TABLE table_name  
ADD CONSTRAINT constraint_name UNIQUE (column1,  
column2, ... column_n);
```

Example :

```
ALTER TABLE supplier3  
ADD CONSTRAINT supplier_unique UNIQUE (supplier_id);
```

DDL - TABLE CONSTRAINT

What is the difference between a unique constraint and a primary key?

Primary Key	Unique Constraint
None of the fields that are part of the primary key can contain a null value.	Some of the fields that are part of the unique constraint can contain null values as long as the combination of values is unique .

DDL - TABLE CONSTRAINT

Disable/enable Unique Constraint

The syntax for disabling a unique constraint is:

```
ALTER TABLE table_name  
DISABLE/ENABLE CONSTRAINT constraint_name;
```

Example

```
ALTER TABLE supplier3  
DISABLE CONSTRAINT supplier_unique;
```

```
ALTER TABLE supplier3  
ENABLE CONSTRAINT supplier_unique;
```

DDL - TABLE CONSTRAINT

Drop Unique Constraint

The syntax for dropping a unique constraint is :

```
ALTER TABLE table_name  
DROP CONSTRAINT constraint_name;
```

Example :

```
ALTER TABLE supplier3  
DROP CONSTRAINT supplier_unique;
```





Thank you

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