

Primary Key Constraint VS. UNIQUE + NOT NULL Constraint

❖ Primary Key Constraint

- **Uniquely identifies each row** in a table.
- **Automatically includes both:**
 - UNIQUE
 - NOT NULL
- A table can have **only one primary key**.
- Can be **single-column or multi-column (composite)**.

❖ UNIQUE + NOT NULL Constraint

- UNIQUE ensures all values in the column are **distinct**.
- NOT NULL ensures the column **cannot have NULLs**.
- Together, they **behave like** a primary key, but:
 - You can define **multiple UNIQUE constraints** in a table.
 - It **does not imply "main identity"** of the row.

Key Differences Table:

Feature	Primary Key	UNIQUE + NOT NULL
Uniqueness	✅ Yes	✅ Yes
Allows NULL	❌ No	❌ No (due to NOT NULL manually)
How many per table	❗ Only 1	✅ Many
Default for identification	✅ Yes	❌ No
Name by default	Usually <code>PK_<table></code>	Usually <code>UQ_<table>_<column></code>

Summary:

Constraint	Is Unique?	Is Not Null?	Multiple per table?	Used for main ID?
PRIMARY KEY	✅	✅	❌ Only 1	✅ Yes
UNIQUE + NOT NULL	✅	✅	✅ Multiple allowed	❌ No