SQL Session 3 Table constraints

Errors that can happen while entering values

UserID	name	age	email	mob
1	Utkarsh	28	utkarsh.etlhive@gmail.com	12312412
	Raman			1241254
4	Aditi	16	test@test.com	12312412
4	Karan	22	test2@test.com	1242143125

Table Constraints in SQL

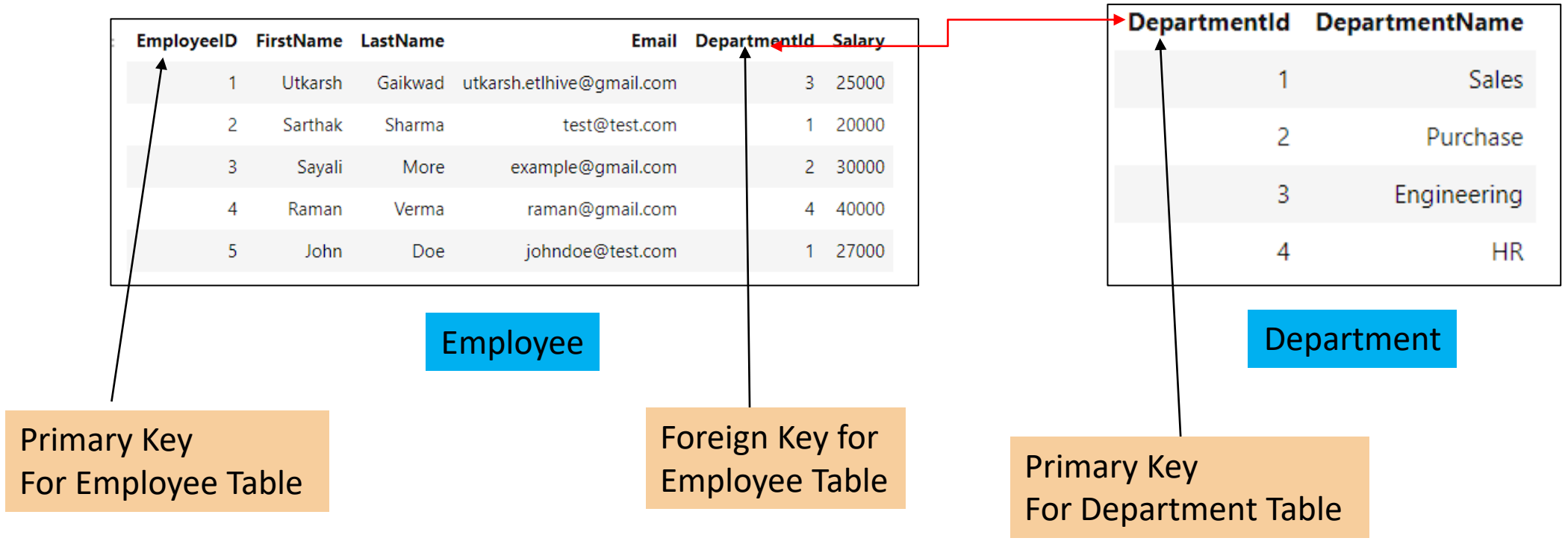
Types of Table Constraints:

- NOT NULL Constraint: Ensures that a column cannot have a NULL value.
- UNIQUE Constraint: Ensures that all values in a column are unique.
- PRIMARY KEY Constraint: A combination of NOT NULL and UNIQUE constraints. It ensures that a column or set of columns uniquely identify each row in the table.
- FOREIGN KEY Constraint: Ensures that values in a column (or a set of columns) match the values in a column(s) of another table (i.e., references the primary key of another table).
- CHECK Constraint: Ensures that the data entered in a column satisfies a specific condition.
- DEFAULT Constraint: Provides a default value for a column when no value is specified.

Syntax for table constraints

```
CREATE TABLE table_name (
        Column1 datatype1 constraint1,
        Column2 datatype2 constraint2,
        …..);
```

Foreign Key vs Primary Key



Departments table

```
CREATE TABLE Departments (
    DepartmentID INT PRIMARY KEY,
    DepartmentName VARCHAR(50) NOT NULL
);
```

Employees Table

```
CREATE TABLE Employees (
    EmployeeID INT PRIMARY KEY,
    FirstName VARCHAR(50) NOT NULL,
    LastName VARCHAR(50) NOT NULL,
    Email VARCHAR(100) UNIQUE,
    DepartmentID INT NOT NULL,
    Salary DECIMAL(10, 2) CHECK (Salary > 0),
    HireDate DATE DEFAULT '2023-01-01',
    FOREIGN KEY (DepartmentID) REFERENCES DEPARTMENT(DepartmentID) );
```

Date format

yyyy-mm-dd

Thank You

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