

Slide 1: Creating Tables

Creating Tables

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EXTENSION

Slide 2: Learning Objectives

Learning Objectives

Discuss situations where it's beneficial to create new tables

Create new tables within an existing database

Write data to a new table

Defining whether columns can accept **NULL** values or not.

Slide 3: Why Tables are Useful

Why Tables are Useful

Use tables to make models and predictions

Create dashboards

Visualize data with other tools

Extract data from other sources

Slide 4: Creating Your Own Table

Creating Your Own Table

CREATE TABLE Shoes

```
(  
  Id          char(10)      PRIMARY KEY,  
  Brand       char(10)      NOT NULL,  
  Type        char(250)     NOT NULL,  
  Color       char(250)     NOT NULL,  
  Price       decimal(8,2)  NOT NULL,  
  Desc        Varchar (750) NULL  
);
```

Slide 5: Nulls and Primary Keys

Nulls and Primary Keys

Every column is either NULL or NOT NULL

An error will be returned if one tries to submit a column with no value

Don't confuse null values with empty strings

Primary keys can not be null

```
CREATE TABLE Shoes
(
  Id          char(10)      PRIMARY KEY,
  Brand       char(10)      NOT NULL,
  Type        char(250)     NOT NULL,
  Color       char(250)     NOT NULL,
  Price       decimal(8,2)  NOT NULL,
  Desc        Varchar (750) NULL
);
```

Slide 6: Primary Keys and Columns Cannot Be NULL

Primary Keys and Columns Cannot Be NULL

Primary Keys **MUST** have a value

CREATE TABLE Shoes

```
(  
  Id          char(10)      PRIMARY KEY,  
  Brand       char(10)      NOT NULL,  
  Type        char(250)     NOT NULL,  
  Color       char(250)     NOT NULL,  
  Price       decimal(8,2)  NOT NULL,  
  Desc        Varchar (750) NULL  
);
```

Slide 7: Adding Data to the Table

Adding Data to the Table

```
INSERT INTO Shoes
VALUES ('14535974'
      , 'Gucci'
      , 'Slippers'
      , 'Pink'
      , '695.00'
      , NULL
      );
```

Slide 8: Adding Data to the Table

Adding Data to the Table

```
INSERT INTO Shoes
VALUES ('14535974'
      , 'Gucci'
      , 'Slippers'
      , 'Pink'
      , '695.00'
      , NULL
      );
```

```
INSERT INTO Shoes
```

```
(Id
 ,Brand
 ,Type
 ,Color
 ,Price
 ,Desc
 )
```

```
VALUES
```

```
('14535974'
 , 'Gucci'
 , 'Slippers'
 , 'Pink'
 , '695.00'
 , NULL
 );
```