14-1\_SQL\_Trushkova\_NOT\_NULL\_UNIQUE\_Constraints

Every value in a column or set of columns (a composite key) must be unique-**UNIQUE Constraint**

For every row entered into the table, there must be a value for that column-**NOT NULL Constraint**

Constraint ensures that the column contains no null values and uniquely identifies each row of the table-**PRIMARY KEY**

Specifies a condition for a column that must be true for each row of data –**CHECK Constraint**

Identifies that table and column in the parent table- **REFERENCES**

An integrity constraint that requires every value in a column or set of columns be unique-**UNIQUE Constraint**

Designates a column (child table) that establishes a relationship between a primary key in the same table and a different table (parent table)- **FOREIGN KEY**

References one or more columns and is defined separately from the definitions of the columns in the table-**Table Level Constraint**

Database rule.- **Constraint**

Database rule that references a single column-**Column Level Constraint**

1. What is a “constraint” as it relates to data integrity?

Constraint is the database rule which maintains database integrity by prohibiting to do something.

1. What are the limitations of constraints that may be applied at the column level and at the table level?

* NOT NULL can be only at column level
* Constraints referring to more than one column must be at Table level
* After word “CONSTRAINT” need to input name this constraint

1. Why is it important to give meaningful names to constraints?

* It makes it easier to identify problem
* It likes comments, help to understand other developers your code

1. Based on the information provided by the owners, choose a datatype for each column. Indicate the length, precision, and scale for each NUMBER datatype.

|  |
| --- |
|  |
| **Global Fast Foods global\_locations Table** | | | | | | |
| NAME | TYPE | DataType | LENGTH | PRECISION | SCALE | NULLABLE |
| id | pk | **NUMBER** | **6** | **0** |  | No |
| name |  | **VARCHAR2** | **50** |  |  |  |
| date\_opened |  | **DATE** |  |  |  | No |
| address |  | **VARCHAR2** | **50** |  |  | No |
| city |  | **VARCHAR2** | **30** |  |  | No |
| zip\_postal\_code |  | **VARCHAR2** | **12** |  |  |  |
| phone |  | **VARCHAR2** | **20** |  |  |  |
| email | uk | **VARCHAR2** | **75** |  |  |  |
| manager\_id |  | **NUMBER** | **6** | **0** |  |  |
| emergency\_contact |  | **VARCHAR2** | **20** |  |  |  |

1. Use “nullable” to indicate those columns that can have null values.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Global Fast Foods global\_locations Table** | | | | | | |
| NAME | TYPE | DataType | LENGTH | PRECISION | SCALE | NULLABLE |
| id | pk | NUMBER | 6 | 0 |  | **No** |
| name |  | VARCHAR2 | 50 |  |  | **Yes** |
| date\_opened |  | DATE |  |  |  | **No** |
| address |  | VARCHAR2 | 50 |  |  | **No** |
| city |  | VARCHAR2 | 30 |  |  | **No** |
| zip\_postal\_code |  | VARCHAR2 | 12 |  |  | **Yes** |
| phone |  | VARCHAR2 | 20 |  |  | **Yes** |
| email | uk | VARCHAR2 | 75 |  |  | **Yes** |
| manager\_id |  | NUMBER | 6 | 0 |  | **Yes** |
| emergency\_contact |  | VARCHAR2 | 20 |  |  | **Yes** |

1. Write the CREATE TABLE statement for the Global Fast Foods locations table to define the constraints at the column level.

A screenshot of a computer

Description automatically generated with medium confidence

1. Execute the CREATE TABLE statement in Oracle Application Express.
2. Execute a DESCRIBE command to view the Table Summary information.

Graphical user interface

Description automatically generated

1. Rewrite the CREATE TABLE statement for the Global Fast Foods locations table to define the UNIQUE constraints at the table level. Do not execute this statement.

A screenshot of a computer

Description automatically generated with medium confidence