NARA Non-Record Material Database (SQL)

Description:
This database holds the NARA Heritage lab's collection of non-record materials, which includes deaccessioned and naturally aged items, treatment materials, and other relevant samples.

Tables:

1. **Product**
   - a. **Features:**
     - i. **Id (Integer):** auto-incremented generated value from database
       - 1. Automatically generated by DB
     - ii. **Product_Name (String):** name of the product
       - 1. REQUIRED
     - iii. **Company_Name (String):** the name of the manufacturer that made the product
     - iv. **Product_Id_C (String):** id given to the product by the manufacturer
     - v. **Hazardous (boolean):** whether or not the product is hazardous
     - vi. **Approve (String):** whether or not the product is still in use
       - 1. Values: “yes”, “no”, “with”, null
         - a. If the value is “with”, explain it in the description column
     - vii. **Date_Created (Date):** date when the product was created
       - 1. Format: year-month-date
         - a. Ex: 2020-09-18
     - viii. **Date_Reviewed (Date):** date when the product was reviewed by NARA
       - 1. Format: year-month-date
         - a. Ex: 2020-09-18
     - ix. **Purpose (String):** the purpose of the product
       - 1. Values: “Holding Maintenance”, “Exhibitions”, “Conservation Treatment”, “Record Materials”
       - 2. Full documentation of this in Google Doc named “Suggested Purpose Categories”
     - x. **Photo_URL (String):** the url of the product’s photo
     - xi. **Descriptions (String):** additional info about product
       - 1. Length: 1500 characters

2. Ex: explain size metric (ie. “1.5 means that we have one whole sheet and another half sheet since it was cut”)
3. Ex2: talk about specific product (ie. “one of the items is a defect”)

xii. **Quantity_Metric (String):** the metric to quantify the object

1. Ex: lbs

xiii. **Quantity_Numeric (Double):** the number of Quantity_Metric of the product

1. Ex: 2
    a. Meaning: 2 → 2 lbs of the product

xiv. **Position (String):** part of the room where the product is at

1. Ex: Cabinet 2

xv. **Room_Number (Integer):** room number where the product is at

1. Ex: 1800

2. Material

a. Features:

i. **Id (Integer):** auto-incremented generated value from database

1. Automatically generated by DB

ii. **Material_Name (String):** name of the material

3. Test

a. Features:

i. **Id (Integer):** auto-incremented generated value from database

1. Automatically generated by DB

ii. **Test_Name (String):** name of the test

1. REQUIRED

iii. **Description (String):** description and additional info about the test

1. Length: 1500 characters

iv. **Result (String):** result of that test

1. Values: “pass”, “fail”, “ongoing”, “see description”

v. **Test_Sheet (String):** the csv file of the test

1. Ex: test1.csv

vi. **Instrument_Id (Integer):** the database id of instrument being used in the test

1. Connects the Instrument table to the Test table because of the many-to-one relationship

4. **Instrument**
    a. **Features:**
        i. **Id (Integer):** auto-incremented generated value from database
            1. Automatically generated by DB
        ii. **Instrument_Name (String):** name of the instrument
            1. REQUIRED
            2. **Ex: FTIR**
        iii. **Description (String):** description and additional info about the instrument
            1. Length: 1500 characters
5. **ProdutMaterial**
    a. Relationship table that connects the Product Table to the Material Table because of the many-to-many relationship
    b. **Features:**
        i. **Product_Id (Integer):** database id of the product
        ii. **Material_Id (Integer):** database id of the material
6. **ProductTest**
    a. Relationship table that connects the Product Table to the Test Table because of the many-to-many relationship
    b. **Features:**
        i. **Product_Id (Integer):** database id of the product
        ii. **Test_Id (Integer):** database id of the test

Table Relationships:

1. **Product to Material:** many-to-many relationship
2. **Product to Test:** many-to-many relationship
3. **Test to Instrument:** many-to-one relationship
    a. Instrument can be used in MANY test
    b. Test can use ONE instrument at most

MySQL Workbench:

1. Make sure to declare database:

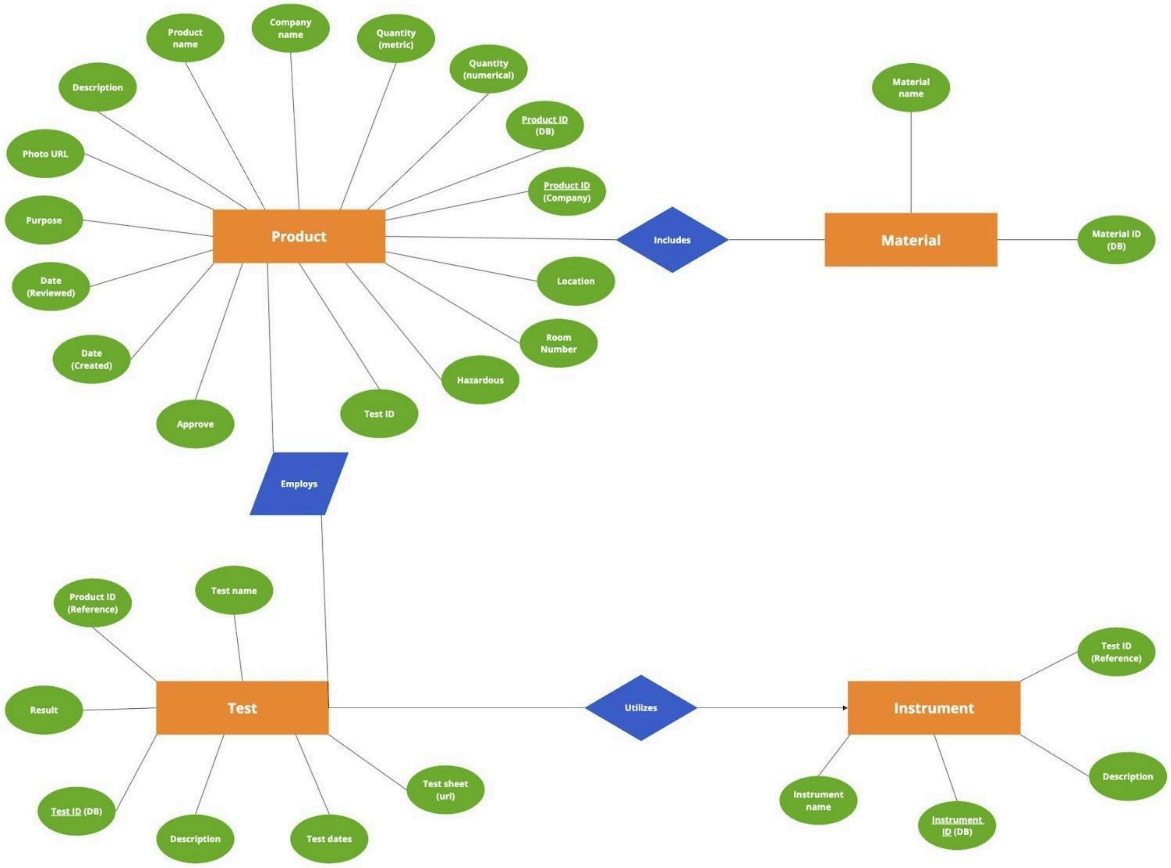
```
CREATE DATABASE naraDB;

USE naraDB;
```

Common errors:

1. Create database table
    a. CREATE DATABASE naraDB;
2. Unable to access database in MySQL:
    a. USE naraDB;
3. Unable to update or remove from tables in MySQL Workbench:
    a. SET SQL_SAFE_UPDATES = 0;
    b. SET FOREIGN_KEY_CHECKS = 0;
        i. SET FOREIGN_KEY_CHECKS = 1;
            1. Run this line after you remove table

Additional Info:

1. Maybe add “tested by” column to Test table


Product name
Company name
Quantity (metric)
Quantity (numerical)
Description
Product ID (DB)
Photo URL
Product ID (Company)
Purpose
Product
Includes
Material
Material name
Material ID (DB)
Date (Reviewed)
Location
Date (Created)
Room Number
Hazardous
Approve
Test ID
Employs
Product ID (Reference)
Test name
Result
Test
Utilizes
Instrument
Test ID (Reference)
Test ID (DB)
Description
Test dates
Test sheet (url)
Instrument name
Instrument ID (DB)
Description