Database name: jmrozek

General description

This PostgreSQL database comprises of several tables, each representing different entities related to a business. The tables include 'categories', 'customers', 'employees', 'orders', 'products', 'suppliers' and 'territories' among others. Each table holds specific data; for example, 'categories' holds category information, 'customers' holds customer data, 'orders' contains order details, and 'employees' carries information on the company's employees. The database appears to be a comprehensive representation of a business operation, containing an interconnected system of tables that provide detailed information on the various aspects of the operation, from product details to customer demographics.

Schemas

1. public

Indexes

```
INDEX contact_idx ON public.customers USING btree (contact_name);
```

```
INDEX products_idx ON public.products USING btree (product_name);
```

Tables

1. us_states
2. customers
3. orders
4. employees
5. shippers
6. products
7. order_details
8. categories
9. suppliers
10. region
11. territories
12. employee_territories
13. customer_demographics
14. customer_customer_demo

---

us_states

```
table name = 'us_states'
```

```
Column('state_id', SmallInteger, primary_key=True),
Column('state_name', String(100)),
Column('state_abbr', String(2)),
Column('state_region', String(50))
```

Description

The table is named 'us_states'. It has four columns:

1. 'state_id' which is of SmallInteger type and is the primary key. This means that this field uniquely identifies each record in the table.
2. 'state_name' which is a string of maximum 100 characters. This field probably stores the full name of the state.
3. 'state_abbr' which is a string of 2 characters. This field likely stores the official two-letter abbreviation of the state.
4. 'state_region' which is a string of maximum 50 characters. This field likely stores the region where the state is located.

---

customers

```
table name = 'customers'

Column('customer_id', String(5), primary_key=True),
Column('company_name', String(40), nullable=False),
Column('contact_name', String(30), index=True),
Column('contact_title', String(30)),
Column('address', String(60)),
Column('city', String(15)),
Column('region', String(15)),
Column('postal_code', String(10)),
Column('country', String(15)),
Column('phone', String(24)),
Column('fax', String(24))
```

Description

The table is named 'customers'. It consists of 11 columns.

The first column is 'customer_id' which is of String type with a length of 5 characters. This is the primary key for the table which means that it must contain unique values.

The second column is 'company_name'. It is of String type and can contain up to 40 characters. This field cannot be left empty, as denoted by the 'nullable=False' attribute.

The third column is ‘contact_name’ which is a String type that can hold up to 30 characters. This column is indexed for faster searches and retrieval.

The fourth column is ‘contact_title’ which is also a String type that can hold up to 30 characters.

The fifth column is ‘address’, a String type with a maximum length of 60 characters.

The sixth column ‘city’, seventh column ‘region’, ninth column ‘country’ are all String types with a maximum length of 15 characters.

The eighth column ‘postal_code’ is a String type that can hold up to 10 characters.

The tenth column is ‘phone’, and the eleventh column is ‘fax’, both are String types that have a maximum length of 24 characters.

---

orders

```
table name = 'orders'

Column('order_id', SmallInteger, primary_key=True),
Column('customer_id', ForeignKey('customers.customer_id')),
Column('employee_id', ForeignKey('employees.employee_id')),
Column('order_date', Date),
Column('required_date', Date),
Column('shipped_date', Date),
Column('ship_via', ForeignKey('shippers.shipper_id')),
Column('freight', Float),
Column('ship_name', String(40)),
Column('ship_address', String(60)),
Column('ship_city', String(15)),
Column('ship_region', String(15)),
Column('ship_postal_code', String(10)),
Column('ship_country', String(15))
```

Description

The table is named ‘orders’. It consists of 14 columns:

1. ‘order_id’ - This is a small integer type column serving as the primary key for the table.
2. ‘customer_id’ - This is a foreign key that links to the ‘customer_id’ in the ‘customers’ table.
3. ‘employee_id’ - This is a foreign key that links to the ‘employee_id’ in the ‘employees’ table.

4. ‘order_date’ - This is a date type column, storing the date when the order was made.
5. ‘required_date’ - This is a date type column, storing the required delivery date of the order.
6. ‘shipped_date’ - This is a date type column, storing the date when the order was shipped.
7. ‘ship_via’ - This is a foreign key that links to the ‘shipper_id’ in the ‘shippers’ table, indicating through which shipper the order is sent.
8. ‘freight’ - This is a float type column, storing the freight cost of the order.
9. ‘ship_name’ - This is a string type column with a maximum length of 40 characters, storing the name under which the order is shipped.
10. ‘ship_address’ - This is a string type column with a maximum length of 60 characters, storing the address where the order is shipped.
11. ‘ship_city’ - This is a string type column with a maximum length of 15 characters, storing the city of the shipping address.
12. ‘ship_region’ - This is a string type column with a maximum length of 15 characters, storing the region of the shipping address.
13. ‘ship_postal_code’ - This is a string type column with a maximum length of 10 characters, storing the postal code of the shipping address.
14. ‘ship_country’ - This is a string type column with a maximum length of 15 characters, storing the country of the shipping address.

This table appears to store detailed information about orders placed, including who made the order, who processed it, shipping details, and cost information.

---

employees

```
table name = 'employees'

Column('employee_id', SmallInteger, primary_key=True),
Column('last_name', String(20), nullable=False),
Column('first_name', String(10), nullable=False),
Column('title', String(30)),
Column('title_of_courtesy', String(25)),
Column('birth_date', Date),
Column('hire_date', Date),
Column('address', String(60)),
Column('city', String(15)),
Column('region', String(15)),
Column('postal_code', String(10)),
Column('country', String(15)),
Column('home_phone', String(24)),
Column('extension', String(4)),
Column('photo', LargeBinary),
```

```
Column('notes', Text),
Column('reports_to', ForeignKey('employees.employee_id')),
Column('photo_path', String(255))
```

Description

The table “employees” consists of the following columns:

1. ‘employee_id’ - This is the primary key of the table, and is a small integer type. It cannot be null.
2. ‘last_name’ - This column stores the last name of the employee as a string with a maximum length of 20 characters. It cannot be null.
3. ‘first_name’ - This column stores the first name of the employee as a string with a maximum length of 10 characters. It cannot be null.
4. ‘title’ - This column stores the job title of the employee as a string with a maximum length of 30 characters.
5. ‘title_of_courtesy’ - This column stores the title of courtesy of the employee as a string with a maximum length of 25 characters.
6. ‘birth_date’ - This column stores the birth date of the employee.
7. ‘hire_date’ - This column stores the date when the employee was hired.
8. ‘address’ - This column stores the employee’s address as a string with a maximum length of 60 characters.
9. ‘city’ - This column stores the city of the employee’s address as a string with a maximum length of 15 characters.
10. ‘region’ - This column stores the region of the employee’s address as a string with a maximum length of 15 characters.
11. ‘postal_code’ - This column stores the postal code of the employee’s address as a string with a maximum length of 10 characters.
12. ‘country’ - This column stores the country of the employee’s address as a string with a maximum length of 15 characters.
13. ‘home_phone’ - This column stores the home phone number of the employee as a string with a maximum length of 24 characters.
14. ‘extension’ - This column stores the extension of the employee’s phone number as a string with a maximum length of 4 characters.
15. ‘photo’ - This column stores the photo of the employee as a large binary data.
16. ‘notes’ - This column stores any notes about the employee as text.
17. ‘reports_to’ - This is a foreign key that refers to the ‘employee_id’ of the manager to whom the employee reports.

18. 'photo_path' - This column stores the path of the employee's photo as a string with a maximum length of 255 characters.

---

shippers

```
table name = 'shippers'

Column('shipper_id', SmallInteger, primary_key=True),
Column('company_name', String(40), nullable=False),
Column('phone', String(24))
```

Description

The table is named 'shippers'. It consists of three columns: 'shipper_id', 'company_name', and 'phone'.

The 'shipper_id' column is of type SmallInteger and is set as the primary key of the table, meaning each entry in this column is unique and can be used to identify a specific record in the table.

The 'company_name' column is of type String and can hold up to 40 characters. This column cannot be left empty (nullable=False), which means every record in the table must have an associated company name.

The 'phone' column is of type String and can hold up to 24 characters. There is no restriction on this column being empty, so it can be left blank for some records if the phone number is not available.

---

products

```
table name = 'products'

Column('product_id', SmallInteger, primary_key=True),
Column('product_name', String(40), nullable=False, index=True),
Column('supplier_id', ForeignKey('suppliers.supplier_id')),
Column('category_id', ForeignKey('categories.category_id')),
Column('quantity_per_unit', String(20)),
Column('unit_price', Float),
Column('units_in_stock', SmallInteger),
Column('units_on_order', SmallInteger),
Column('reorder_level', SmallInteger),
Column('discontinued', Integer, nullable=False)
```

Description

The 'products' table consists of several columns with diverse data types. The 'product_id' column is a small integer and serves as the primary key for the table. The 'product_name' column is a string of maximum length 40 characters and cannot be null; it is also indexed for faster searching. The 'supplier_id' and 'category_id' columns are foreign keys referencing the 'supplier_id' in the 'suppliers' table and 'category_id' in the 'categories' table respectively. The 'quantity_per_unit' column is a string of maximum length 20 characters. The 'unit_price' column is a floating-point number. The 'units_in_stock' and 'units_on_order' columns are small integers. The 'reorder_level' is also a small integer. The 'discontinued' column is an integer and it cannot be null.

---

order_details

```
    table name = 'order_details'

    Column('order_id', ForeignKey('orders.order_id'), primary_key=True,
nullable=False),
    Column('product_id', ForeignKey('products.product_id'), primary_key=True,
nullable=False),
    Column('unit_price', Float, nullable=False),
    Column('quantity', SmallInteger, nullable=False),
    Column('discount', Float, nullable=False)
```

Description

The table is named 'order_details'. It has five columns:

1. 'order_id' - this is a foreign key that links to the 'order_id' in the 'orders' table. This is also a primary key for the 'order_details' table and it cannot be null.
2. 'product_id' - this is another foreign key that links to the 'product_id' in the 'products' table. This field also serves as a primary key for the 'order_details' table and it cannot be null.
3. 'unit_price' - this field stores the unit price of each product. It is a float type field and it cannot be null.
4. 'quantity' - this field stores the quantity of each product. It's a small integer type field which also cannot be null.
5. 'discount' - this field stores the discount given for each product. It's a float type field and it also cannot be null.

This table most likely is used to store detailed information about each order, including the specific products ordered, their unit price, quantity, and any discounts applied.

---

categories

```
table name = 'categories'

Column('category_id', SmallInteger, primary_key=True),
Column('category_name', String(15), nullable=False),
Column('description', Text),
Column('picture', LargeBinary)
```

Description

The table is named 'categories'. It consists of four columns: 'category_id', 'category_name', 'description', and 'picture'.

'category_id' is of SmallInteger data type and is the primary key for this table, which means this column uniquely identifies each record in the table.

'category_name' is of String type with a character limit of 15 and cannot contain null values, indicating that this field is required for each record.

'description' is a Text type column that can contain string data. It does not have any constraint regarding null values, which means it can contain empty values.

Finally, 'picture' is a LargeBinary type, designed to hold large amounts of binary data, such as images. This field also doesn't have a constraint regarding null values.

---

suppliers

```
table name = 'suppliers'

Column('supplier_id', SmallInteger, primary_key=True),
Column('company_name', String(40), nullable=False),
Column('contact_name', String(30)),
Column('contact_title', String(30)),
Column('address', String(60)),
Column('city', String(15)),
Column('region', String(15)),
Column('postal_code', String(10)),
Column('country', String(15)),
Column('phone', String(24)),
Column('fax', String(24)),
Column('homepage', Text)
```

Description

The table is named 'suppliers'. It consists of twelve columns:

1. 'supplier_id' is a column of type SmallInteger and it is the primary key of the table.
2. 'company_name' is a column of type String with a maximum length of 40 characters. This is a required field as it cannot be null.
3. 'contact_name' is a column of type String with a maximum length of 30 characters.
4. 'contact_title' is a column of type String with a maximum length of 30 characters.
5. 'address' is a column of type String with a maximum length of 60 characters.
6. 'city' is a column of type String with a maximum length of 15 characters.
7. 'region' is a column of type String with a maximum length of 15 characters.
8. 'postal_code' is a column of type String with a maximum length of 10 characters.
9. 'country' is a column of type String with a maximum length of 15 characters.
10. 'phone' is a column of type String with a maximum length of 24 characters.
11. 'fax' is a column of type String with a maximum length of 24 characters.
12. 'homepage' is a column of type Text.

The table appears to be designed to hold information about suppliers including their company name, contact information (name, title, phone, fax, homepage), and their address (street, city, region, postal code, country).

---

region

```
table name = 'region'

Column('region_id', SmallInteger, primary_key=True),
Column('region_description', String(60), nullable=False)
```

Description

The table is named 'region'. It contains two columns:

1. 'region_id' which is of SmallInteger data type. This is the primary key for the 'region' table, meaning that the values in this column are unique and each value identifies a single row in the table.

2. 'region_description' which is of String data type with a maximum length of 60 characters. The 'nullable=False' indicates that this field cannot be left empty, meaning every row in the table must have a value for 'region_description'.

---

territories

```
table name = 'territories'

Column('territory_id', String(20), primary_key=True),
Column('territory_description', String(60), nullable=False),
Column('region_id', ForeignKey('region.region_id'), nullable=False)
```

Description

The table is named 'territories'. It consists of three columns: 'territory_id', 'territory_description', and 'region_id'.

'territory_id' is a string type column up to 20 characters long and serves as the primary key of the table, meaning that each value in this column must be unique.

'territory_description' is a string type column that can hold up to 60 characters. This column cannot be left empty or null, indicating that every territory must have a description.

'region_id' is a foreign key that references the 'region_id' in the 'region' table. This column also cannot be left null. This relationship suggests that each territory is associated with a specific region from the 'region' table.

---

employee_territories

```
table name = 'employee_territories'

Column('employee_id', ForeignKey('employees.employee_id'), primary_key=True,
nullable=False),
Column('territory_id', ForeignKey('territories.territory_id'),
primary_key=True, nullable=False)
```

Description

The table is named 'employee_territories'. It has two columns: 'employee_id' and 'territory_id'. Both of these columns serve as the primary key for the table, meaning that each combination of 'employee_id' and 'territory_id' must be unique.

The 'employee_id' column is a foreign key that references the 'employee_id' column in the 'employees' table. This indicates a relationship between the 'employee_territories' and 'employees' tables, where each entry in 'employee_territories' must correspond to an existing 'employee_id' in the 'employees' table.

Similarly, the 'territory_id' column is a foreign key that references the 'territory_id' column in the 'territories' table. This means each entry in 'employee_territories' must correspond to an existing 'territory_id' in the 'territories' table.

Both 'employee_id' and 'territory_id' columns cannot be null, which means they must contain a value.

---

customer_demographics

```
table name = 'customer_demographics'

Column('customer_type_id', String(5), primary_key=True),
Column('customer_desc', Text)
```

Description

The table is named 'customer_demographics'. It has two columns: 'customer_type_id' and 'customer_desc'.

The 'customer_type_id' column is of string data type and can hold a maximum of 5 characters. This column serves as the primary key for the table which means each entry in this column should be unique and it cannot contain null values.

The second column, 'customer_desc', is of text data type. It is used to store descriptions or additional information about the customer. There is no specified limit to the length of the strings that this column can hold. It can contain null values as it is not marked as a primary key or unique.

---

customer_customer_demo

```
table name = 'customer_customer_demo'

Column('customer_id', ForeignKey('customers.customer_id'), primary_key=True,
nullable=False),
Column('customer_type_id',
ForeignKey('customer_demographics.customer_type_id'), primary_key=True,
nullable=False)
```

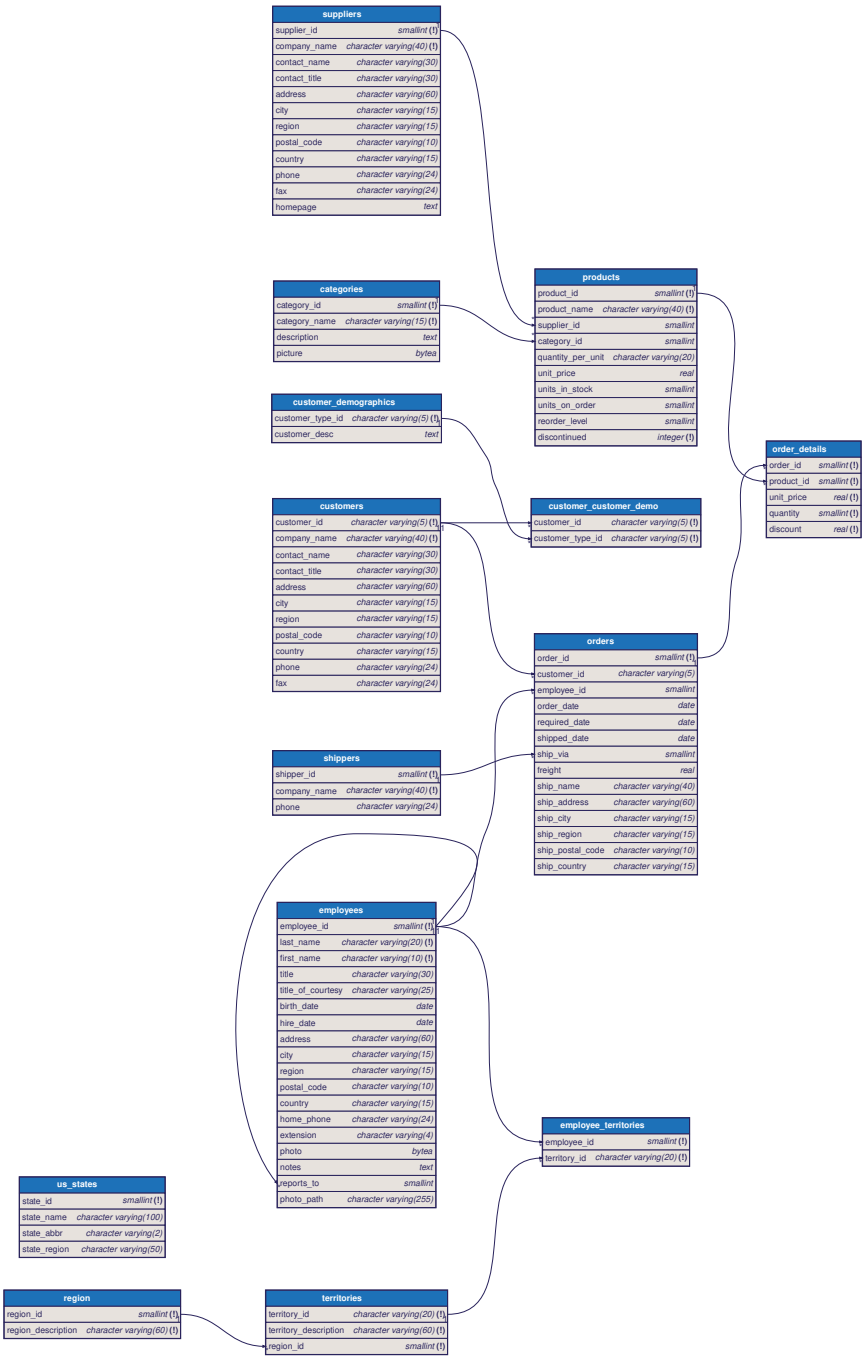
Description

The table is named 'customer_customer_demo'. It has two columns: 'customer_id' and 'customer_type_id'. Both of these columns are primary keys, meaning that they uniquely identify each record in the table.

The ‘customer_id’ column references the ‘customer_id’ in the ‘customers’ table, and the ‘customer_type_id’ column references the ‘customer_type_id’ in the ‘customer_demographics’ table. This establishes a relationship between the ‘customer_customer_demo’ table and both the ‘customers’ and ‘customer_demographics’ tables.

Neither of these columns can contain null values, indicating that a value must be provided for both ‘customer_id’ and ‘customer_type_id’ for each record in the ‘customer_customer_demo’ table.

Graph


suppliers
supplier_id smallint (1)
company_name character varying(40) (1)
contact_name character varying(30)
contact_title character varying(30)
address character varying(60)
city character varying(15)
region character varying(15)
postal_code character varying(10)
country character varying(15)
phone character varying(24)
fax character varying(24)
homepage text
categories
category_id smallint (1)
category_name character varying(15) (1)
description text
picture bytea
customer_demographics
customer_type_id character varying(5) (1)
customer_desc text
customers
customer_id character varying(5) (1)
company_name character varying(40) (1)
contact_name character varying(30)
contact_title character varying(30)
address character varying(60)
city character varying(15)
region character varying(15)
postal_code character varying(10)
country character varying(15)
phone character varying(24)
fax character varying(24)
shippers
shipper_id smallint (1)
company_name character varying(40) (1)
phone character varying(24)
products
product_id smallint (1)
product_name character varying(40) (1)
supplier_id smallint
category_id smallint
quantity_per_unit character varying(20)
unit_price real
units_in_stock smallint
units_on_order smallint
reorder_level smallint
discontinued integer (1)
customer_customer_demo
customer_id character varying(5) (1)
customer_type_id character varying(5) (1)
order_details
order_id smallint (1)
product_id smallint (1)
unit_price real (1)
quantity smallint (1)
discount real (1)
orders
order_id smallint (1)
customer_id character varying(5)
employee_id smallint
order_date date
required_date date
shipped_date date
ship_via smallint
freight real
ship_name character varying(40)
ship_address character varying(60)
ship_city character varying(15)
ship_region character varying(15)
ship_postal_code character varying(10)
ship_country character varying(15)
employees
employee_id smallint (1)
last_name character varying(20) (1)
first_name character varying(10) (1)
title character varying(30)
title_of_courtesy character varying(25)
birth_date date
hire_date date
address character varying(60)
city character varying(15)
region character varying(15)
postal_code character varying(10)
country character varying(15)
home_phone character varying(24)
extension character varying(4)
photo bytea
notes text
reports_to smallint
photo_path character varying(255)
employee_territories
employee_id smallint (1)
territory_id character varying(20) (1)
us_states
state_id smallint (1)
state_name character varying(100)
state_abbr character varying(2)
state_region character varying(50)
region
region_id smallint (1)
region_description character varying(60) (1)
territories
territory_id character varying(20) (1)
territory_description character varying(60) (1)
region_id smallint (1)