Simple Sales Application Documentation

Introduction

The purpose of the Simple Sales Application is to manage sales invoices, customers, and articles within a sales setting. It employs Microsoft SQL Server as its Relational Database Management System (RDBMS) to effectively store and handle the data. This documentation offers a comprehensive view of the application's components and their connections, aiding developers in comprehending the system's structure and functionality.

Database Schema

The core database schema comprises three primary tables: `Invoices`, `Customers`, and `Articles`. Each table represents a unique entity within the system and establishes connections with other tables. Now, let's delve into a detailed exploration of these tables and their respective relationships.

Customers Table

The `Customers` table contains data pertaining to customers involved in sales transactions. Each customer is assigned a unique identifier (`ID`) and encompasses the following fields:

• `ID` (Primary Key): Unique identifier for the customer.

• `name`: Name of the customer.

• `phonenumber`: Phone number of the customer.

Articles Table

The `Articles` table stores comprehensive information about the articles or products sold in sales transactions. Each article is identified by a unique identifier (`ID`) and encompasses the following fields:

• `ID` (Primary Key): Unique identifier for the customer.

• `name`: Name of the article.

• `price`: Price of the article.

• `datetime`: Dates.

Invoice Table

The `Invoices` table retains data related to the sales invoices produced within the application. Each invoice possesses a distinctive identifier (`ID`) and comprises the following fields:

• `ID` (Primary Key): Unique identifier for the customer.

• `customerid` (Foreign Key): Identifier referencing the associated customer.

• `articleid`: Identifier referencing the associated article.

• `datetime`: Date when the invoice was created.

• `price`: The total price for the invoice.

• `paymentmethod`: the way to pay for the invoice.|

Relationships

The Simple Sales Application establishes connections and ensures data integrity through relationships between its tables. The following relationships are defined within the system:

1. One-to-Many Relationship: Customers to Invoices

- Each customer can be dealt with multiple invoices.

- The `customerid` field in the `Invoices` table serves as a foreign key, referencing the `customerid` field in the `Customers` table.

2. Many-to-Many Relationship: Articles to Invoices

- Each invoice can include multiple articles, and each article can be featured in multiple invoices.

- To represent this relationship, a separate junction table called `Invoice` is utilized.

- The `ID` field in the `Invoice` table acts as a primary key.

- The `articleid` field in the `Invoice` table acts as a foreign key, referencing the `articleid` field in the `Articles` table.

Conclusion

This documentation has presented a high-level view of the entities and connections within the Simple Sales Application. Grasping the structure and relationships among the tables is essential for the development and upkeep of the application. With the Microsoft SQL Server RDBMS as the foundation, the system guarantees data integrity and facilitates effective retrieval and manipulation of sales-related data.

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