# Address

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDAddress | int | Unique identifier for each address | No | Auto-incremented value starting from 1 |
| IDClient | int | Foreign key referencing the client | No | Must match an existing IDClient in the Client table |
| Province | nvarchar(64) | Province of the address | No | Must not be null |
| City | nvarchar(64) | City of the address | No | Must not be null |
| District | nvarchar(64) | District of the address | No | Must not be null |
| ZIPCode | nvarchar(10) | ZIP code of the address | Yes | Optional; if provided, must follow the format for ZIP codes |
| Description | nvarchar(512) | Additional description of the address | Yes | Optional; descriptive text about the address |

# Appointment

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDAppointment | int | Unique identifier for each appointment | No | Auto-incremented value starting from 1 |
| IDPet | int | Foreign key referencing the pet | No | Must match an existing IDPet in the Pet table |
| IDEmployee | int | Foreign key referencing the employee | No | Must match an existing IDEmployee in the Employee table |
| IDStore | int | Foreign key referencing the store | No | Must match an existing IDStore in the Store table |
| IDStatus | int | Foreign key referencing the status type | No | Must match an existing IDStatus in the StatusType table |
| DateTime | datetime | Timestamp of the appointment | No | Default to current date and time if not provided |

# Breed

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDBreed | int | Unique identifier for each breed | No | Auto-incremented value starting from 1 |
| IDPetType | int | Foreign key referencing the pet type | No | Must match an existing IDPetType in the PetType table |
| Name | nvarchar(128) | Name of the breed | No | Must not be null |

# Cart

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDClient | int | Foreign key referencing the client | No | Must match an existing IDClient in the Client table |
| IDProduct | int | Foreign key referencing the product | No | Must match an existing IDProduct in the Product table |
| Quantity | int | Quantity of the product in the cart | No | Must be a non-negative integer |

# Client

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDClient | int | Unique identifier for each client | No | Auto-incremented value starting from 1 |
| IDUser | int | Foreign key referencing the user | No | Must match an existing IDUser in the User table |
| Name | nvarchar(255) | Full name of the client | No | Must not be null |
| PhoneNumber | nvarchar(20) | Contact phone number of the client | Yes | Optional; if provided, must follow the format for phone numbers |

# Employee

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDEmployee | int | Unique identifier for each employee | No | Auto-incremented value starting from 1 |
| IDUser | int | Foreign key referencing the user | No | Must match an existing IDUser in the User table |
| Name | nvarchar(255) | Full name of the employee | No | Must not be null |
| PhoneNumber | nvarchar(20) | Contact phone number of the employee | Yes | Optional; if provided, must follow the format for phone numbers |

# Inventory

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDProduct | int | Foreign key referencing the product | No | Must match an existing IDProduct in the Product table |
| IDStore | int | Foreign key referencing the store | No | Must match an existing IDStore in the Store table |
| Quantity | int | Quantity of the product in the store | No | Must be a non-negative integer |

# Invoice

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDInvoice | int | Unique identifier for each invoice | No | Auto-incremented value starting from 1 |
| IDAppointment | int | Foreign key referencing the appointment | No | Must match an existing IDAppointment in the Appointment table |
| IDClient | int | Foreign key referencing the client | No | Must match an existing IDClient in the Client table |
| IDPayment | int | Foreign key referencing the payment | No | Must match an existing IDPayment in the Payment table |
| IDStatus | int | Foreign key referencing the status type | No | Must match an existing IDStatus in the StatusType table |
| DateTime | datetime | Timestamp of the invoice | No | Default to current date and time if not provided |

# User

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDUser | int | Unique identifier for each user | No | Auto-incremented value starting from 1 |
| IDUserType | int | Foreign key referencing the user type | No | Must match an existing IDUserType in the UserType table |
| LoginID | nvarchar(255) | Unique login identifier for the user | No | Must be unique and not null |
| Password | nvarchar(255) | Encrypted password for the user | No | Must be hashed before storage |

# InvoiceDetail

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDInvoiceDetail | int | Unique identifier for each invoice detail | No | Auto-incremented value starting from 1 |
| IDInvoice | int | Foreign key referencing the invoice | No | Must match an existing IDInvoice in the Invoice table |
| IDProduct | int | Foreign key referencing the product | No | Must match an existing IDProduct in the Product table |
| Description | nvarchar(512) | Description of the product or service in the invoice detail | Yes | Optional; descriptive text about the product or service |
| Quantity | int | Quantity of the product or service | No | Must be a non-negative integer |
| Price | money | Price of the product or service | No | Must be a positive monetary value |

# Log

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDLog | int | Unique identifier for each log entry | No | Auto-incremented value starting from 1 |
| IDLogType | int | Foreign key referencing the log type | No | Must match an existing IDLogType in the LogType table |
| IDUser | int | Foreign key referencing the user | No | Must match an existing IDUser in the User table |
| DateTime | datetime | Timestamp of the log entry | No | Default to current date and time if not provided |
| Description | nvarchar(255) | Description of the log entry | Yes | Optional text describing the log entry |

# LogType

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| LogType | int | Unique identifier for each log type | No | Auto-incremented value starting from 1 |
| Name | int | Name of the log type | No | Must not be null and should be descriptive |

# Payment

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDPayment | int | Unique identifier for each payment | No | Auto-incremented value starting from 1 |
| IDPaymentType | int | Foreign key referencing the payment type | No | Must match an existing IDPaymentType in the PaymentType table |
| Name | nvarchar(64) | Name of the payment method | No | Must not be null |

# PaymentType

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDPaymentType | int | Unique identifier for each payment type | No | Auto-incremented value starting from 1 |
| Name | nvarchar(64) | Name of the payment type | No | Must not be null |

# Pet

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDPet | int | Unique identifier for each pet | No | Auto-incremented value starting from 1 |
| IDBreed | int | Foreign key referencing the breed | No | Must match an existing IDBreed in the Breed table |
| IDClient | int | Foreign key referencing the client | No | Must match an existing IDClient in the Client table |
| Name | nvarchar(128) | Name of the pet | No | Must not be null |
| Birthdate | date | Birthdate of the pet | Yes | Optional; if provided, must be a valid date |
| Weight | int | Weight of the pet | Yes | Optional; if provided, must be a non-negative integer |
| Notes | nvarchar(512) | Additional notes about the pet | Yes | Optional; descriptive text about the pet |

# PetType

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDPetType | int | Unique identifier for each pet type | No | Auto-incremented value starting from 1 |
| Name | nvarchar(64) | Name of the pet type | No | Must not be null |

# Product

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDProduct | int | Unique identifier for each product | No | Auto-incremented value starting from 1 |
| IDProductType | int | Foreign key referencing the product type | No | Must match an existing IDProductType in the ProductType table |
| Name | nvarchar(255) | Name of the product | No | Must not be null |
| Description | nvarchar(512) | Description of the product | Yes | Optional; descriptive text about the product |
| Price | money | Price of the product | No | Must be a positive monetary value |

# ProductType

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDProductType | int | Unique identifier for each product type | No | Auto-incremented value starting from 1 |
| Name | nvarchar(255) | Name of the product type | No | Must not be null |

# Review

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDReview | int | Unique identifier for each review | No | Auto-incremented value starting from 1 |
| IDProduct | int | Foreign key referencing the product | No | Must match an existing IDProduct in the Product table |
| IDClient | int | Foreign key referencing the client | No | Must match an existing IDClient in the Client table |
| Description | nvarchar(512) | Description of the review | Yes | Optional; text describing the review |
| Rating | tinyint | Rating given in the review (1-5) | No | Must be an integer between 1 and 5 |
| DateTime | datetime | Timestamp of the review | No | Default to current date and time if not provided |

# Shipping

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDShipping | int | Unique identifier for each shipping record | No | Auto-incremented value starting from 1 |
| IDInvoice | int | Foreign key referencing the invoice | No | Must match an existing IDInvoice in the Invoice table |
| IDAddress | int | Foreign key referencing the address | No | Must match an existing IDAddress in the Address table |
| IDStatus | int | Foreign key referencing the status type | No | Must match an existing IDStatus in the StatusType table |
| TrackingID | nvarchar(128) | Tracking ID for the shipping | No | Must be unique |

# StatusType

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDStatus | int | Unique identifier for each status type | No | Auto-incremented value starting from 1 |
| Name | nvarchar(64) | Name of the status type | No | Must not be null |

# Store

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDStore | int | Unique identifier for each store | No | Auto-incremented value starting from 1 |
| Location | nvarchar(128) | Location of the store | No | Must not be null |

# User

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDUser | int | Unique identifier for each user | No | Auto-incremented value starting from 1 |
| IDUserType | int | Foreign key referencing the user type | No | Must match an existing IDUserType in the UserType table |
| LoginID | nvarchar(64) | Unique login identifier for the user | No | Must be unique and not null |
| Password | nvarchar(64) | Encrypted password for the user | No | Must be hashed before storage |

# UserType

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Column** | **Data Type** | **Description** | **Null** | **Calculation Rule** |
| IDUserType | int | Unique identifier for each user type | No | Auto-incremented value starting from 1 |
| Name | nvarchar(64) | Name of the user type | No | Must not be null |
| Clearance | int | Clearance level for the user type | No | Integer value representing the level of clearance |