|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **WAREHOUSES** | | | | |
| Key Types | Column Optionality | Column Name | Data Types | Length |
| PK | \* | **Warehouse\_id** | Integer |  |
|  | \* | **Region** | Varchar | (40) |

Relational Model & Business Rules

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **PRODUCT\_INVENTORY** | | | | |
| Key Types | Column Optionality | Column Name | Data Types | Length |
| PK,FK | \* | **Warehouse\_id** | Integer |  |
| PK,FK | \* | **Model\_id** | Integer |  |
|  | \* | **Model\_stock** | integer |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **PRODUCTS** | | | | |
| Key Types | Column Optionality | Column Name | Data Types | Length |
| PK | \* | **Model\_id** | Integer |  |
| UK | \* | **Serial\_number** | Integer |  |
|  | \* | **Item\_Description** | Varchar | (40) |
|  | O | Height | Decimal | (5,2) |
|  | O | Width | Decimal | (5,2) |
|  | O | Item\_weight | Decimal | (5,2) |
|  | O | Unit\_price | Decimal | (5,2) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ORDERS** | | | | |
| Key Types | Column Optionality | Column Name | Data Types | Length |
| PK | \* | **Order\_id** | Integer |  |
|  | O | Order\_date | Date | YYYY-MM-DD |
|  | O | Total\_price | decimal | (7,2) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ORDER\_LINES** | | | | |
| Key Types | Column Optionality | Column Name | Data Types | Length |
| PK,FK | \* | **Model\_id** | integer |  |
| PK,FK | \* | **Order\_id** | Integer |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ORDER\_CUSTOMERS** | | | | |
| Key Types | Column Optionality | Column Name | Data Types | Length |
| PK,FK | \* | **Order\_id** | Integer |  |
| PK,FK | \* | **Customer\_id** | integer |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **CUSTOMERS** | | | | |
| Key Types | Column Optionality | Column Name | Data Types | Length |
| PK | \* | **Customer\_id** | Integer |  |
|  | O | Cust\_first\_name | Varchar | (40) |
|  | O | Cust\_last\_name | Varchar | (40) |
| FK | \* | **Associate\_id** | integer |  |
|  | O | Customer\_address | varchar | (40) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ASSOCIATES** | | | | |
| Key Types | Column Optionality | Column Name | Data Types | Length |
| PK | \* | **Associate\_id** | Integer |  |
|  | O | Associate\_first\_name | Varchar | (40) |
|  | O | Associate\_last\_name | varchar | (40) |
|  | \* | salary | Decimal | (7,2) |
|  | o | Job\_code | Varchar | (1) |
|  | \* | Active\_status | Varchar | (1) |

Business Rules

* Customer\_id auto generated identity 1000
* Order\_id auto generated sequence 2000
* Associate\_id no less than 5000
* Warehouse\_id is greater than 1 and less than 1000
* Model\_id not less than 3000
* Default order date – current date
* Default active\_status ‘T’ for active
* Salary less than 125,000
* Salary between 50,000 and 100,000
* List of values job\_code: ‘A’, ‘B’, ‘C’, ‘D’
* Boolean value: active status: ‘T’ for active or ‘F’ for inactive