Table 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Privileged Users** |  |  |  |  |
| **Attribute** | **Data type** | **Nullable** |  | **Format** |
| Username | String | Not Null |  |  |
| Password | String | Not Null |  |  |
| First Name | String | Not Null |  |  |
| Last Name | String | Not Null |  |  |
| Roles | list<String> | Not Null |  |  |
|  |  |  |  |  |
| **Vehicles** |  |  |  |  |
| **Attribute** | **Data type** | **Nullable** |  | **Format** |
| VIN | String | Not Null |  | Alphanumeric, 17 digits without I, O, Q |
| Vehicle type | list<String> | Not Null |  |  |
| Manufacturer name | list<String> | Not Null |  |  |
| Model name | String | Not Null |  |  |
| Model Year | Date | Not Null |  | [YYYY] |
| Date added | Date | Not Null |  | [MM-DD-YYYY] |
| Invoice Price | Float | Not Null |  | two digits after decimal point, positive |
| Sold | Boolean | Not Null |  | [Sold, Unsold] |
| Description | String | NULL |  |  |
| List price | Float | Not Null |  | two digits after decimal point, positive |
| Color | list<String> | Not Null |  |  |
|  |  |  |  |  |
| **Customer- Persons** |  |  |  |  |
| **Attribute** | **Data type** | **Nullable** |  | **Format** |
| Address | String | Not Null |  | Valid address format |
| Phone number | String | Not Null |  | Numeric, 10 or 11 digits |
| Email | String | NULL |  | Valid email format: such as username@aa.bb |
| Fist Name | String | Not Null |  |  |
| Last Name | String | Not Null |  |  |
| Driver's license number | String | Not Null |  |  |
|  |  |  |  |  |
| **Customer- Business** |  |  |  |  |
| **Attribute** | **Data type** | **Nullable** |  | **Format** |
| Address | String | Not Null |  | Valid address format |
| Phone number | String | Not Null |  | Numeric, 10 or 11 digits |
| Email | String | NULL |  | Valid email format: such as username@aa.bb |
| Tax Identification ID | String | Not Null |  | Numeric, 9 digits |
| Business name | String | Not Null |  |  |
| Primary Contact's Name | String | Not Null |  |  |
| Title of primary contact | String | Not Null |  |  |
|  |  |  |  |  |
| **Sales Events** |  |  |  |  |
| **Attribute** | **Data type** | **Nullable** |  | **Format** |
| Sold price | Float | Not Null |  | two digits after decimal point, positive |
| Sale Date | Date | Not Null |  | [MM-DD-YYYY] |
|  |  |  |  |  |
| **Repair Events** |  |  |  |  |
| **Attribute** | **Data type** | **Nullable** |  | **Format** |
| Labor Charge | Float | Not Null |  | two digits after decimal point, non-negative |
| Start Date | Date | Not Null |  | [MM-DD-YYYY] |
| End Day | Date | Null |  | [MM-DD-YYYY] |
| Odometer | Integer | Not Null |  | Positive |
| Description | String | Not Null |  |  |
| Total Cost | Float | Not Null |  | two digits after decimal point, non-negative |
| Status | Boolean | Not Null |  | [Open, Close] |
| Part Cost | Float |  |  | two digits after decimal point, positive |
| Description | String |  |  |  |
|  |  |  |  |  |
| **Needs Relationship** |  |  |  |  |
| **Attribute** | **Data type** | **Nullable** |  | **Format** |
| Quantity used | Integer | Not Null |  | Positive |
|  |  |  |  |  |
| **Parts** |  |  |  |  |
| **Attribute** | **Data type** | **Nullable** |  | **Format** |
| Price | Float | Not Null |  | two digits after decimal point, non-negative |
| Part Number | String | Not Null |  |  |
|  |  |  |  |  |
| **Cars** |  |  |  |  |
| **Attribute** | **Data type** | **Nullable** |  | **Nullable** |
| Number of Doors | Integer | Not Null |  | Positive |
|  |  |  |  |  |
|  |  |  |  |  |
| **Van/Minivans** |  |  |  |  |
| **Attribute** | **Data type** | **Nullable** |  | **Format** |
| Has Driver's side back door | Boolean | Not Null |  | [Yes, No] |
|  |  |  |  |  |
| **SUVs** |  |  |  |  |
| **Attribute** | **Data type** | **Nullable** |  | **Format** |
| Drivetrain type | String | Not Null |  |  |
| Number of cupholders | Integer | Not Null |  | Non-negative |
|  |  |  |  |  |
| **Convertibles** |  |  |  |  |
| **Attribute** | **Data type** | **Nullable** |  | **Format** |
| Roof type | String | Not Null |  |  |
| Back seat count | Integer | Not Null |  | Non-negative |
|  |  |  |  |  |
| **Trucks** |  |  |  |  |
| **Attribute** | **Data type** | **Nullable** |  | **Format** |
| Number of rear axles | Integer | Not Null |  | Positive |
| Cargo capacity | float | Not Null |  | Positive |
| Cargo cover type | String | Not Null |  |  |