**Business Logic Constraints**:

**Vehicles**:

* The model name and model year are entered by the user in free form
* Model years cannot exceed the current year plus one.
* Year entered must include century digits.
* A description field can be free form of multiple pieces of additional information
* Invoice\_price must include dollars and cents. On the client side, two separate boxes (dollars and cents) may enforce both values to be entered.

**Data Types:**

**Vehicles:**

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Data Type** | **Nullable** |
| Year | Integer | Not Null |
| Model\_name | String | Not Null |
| Invoice\_price | Float | Not Null |
| VIN | String | Not Null |
| Color | List<Strings> | Not Null |
| Description | String | Null |

**(TO DO-keep invoice price separate or as one?) (Int or float?) (Cents can be null?)**

**Manufacturer:**

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Data Type** | **Nullable** |
| Manufacturer\_name | String | Not Null |

**Car:**

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Data Type** | **Nullable** |
| Door\_count | Int | Not Null |

**Convertible:**

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Data Type** | **Nullable** |
| Roof\_type | String | Not Null |
| Back\_seat\_count | Int | Not Null |

**Truck:**

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Data Type** | **Nullable** |
| Cargo\_capacity | Int | Not Null |
| Cargo\_cover\_type | String | Null |
| Axle\_count | Int | Not Null |

**Van/Mini Van:**

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Data Type** | **Nullable** |
| Has\_driver\_back\_door | Boolean | Not Null |

**SUV:**

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Data Type** | **Nullable** |
| Drivetrain\_type | String | Not Null |
| Cupholder\_count | Int | Not Null |