**1. User Table**

| **Field Name** | **Data Type** | **Key** | **Relationship** |
| --- | --- | --- | --- |
| UserId | INT | PK |  |
| Username | NVARCHAR(100) |  |  |
| PasswordHash | NVARCHAR(MAX) |  |  |
| Role | NVARCHAR(50) |  |  |
| Email | NVARCHAR(100) |  |  |
| IsActive | BIT |  |  |

**2. CarModels Table**

| **Field Name** | **Data Type** | **Key** | **Relationship** |
| --- | --- | --- | --- |
| ModelId | INT | PK |  |
| ModelName | NVARCHAR(100) |  |  |
| EngineType | NVARCHAR(50) |  |  |
| FuelEfficiency | FLOAT |  |  |
| DesignFeatures | NVARCHAR(MAX) |  |  |
| ProductionCost | DECIMAL(18, 2) |  |  |
| Status | NVARCHAR(50) |  |  |

**3. ProductionOrders Table**

| **Field Name** | **Data Type** | **Key** | **Relationship** |
| --- | --- | --- | --- |
| OrderId | INT | PK |  |
| CarModelId | INT | FK | References **CarModels(ModelId)** |
| StartDate | DATETIME |  |  |
| EndDate | DATETIME |  |  |
| Quantity | INT |  |  |
| ProductionManagerId | INT | FK | References **Users(UserId)** |
| Status | NVARCHAR(50) |  |  |

**4. Inventory Table**

| **Field Name** | **Data Type** | **Key** | **Relationship** |
| --- | --- | --- | --- |
| InventoryId | INT | PK |  |
| ComponentName | NVARCHAR(100) |  |  |
| Quantity | INT |  |  |
| SupplierId | INT | FK | References **Suppliers(SupplierId)** |
| StockLevel | INT |  |  |
| ReorderThreshold | INT |  |  |

**5. Suppliers Table**

| **Field Name** | **Data Type** | **Key** | **Relationship** |
| --- | --- | --- | --- |
| SupplierId | INT | PK |  |
| Name | NVARCHAR(100) |  |  |
| ContactDetails | NVARCHAR(MAX) |  |  |
| MaterialType | NVARCHAR(100) |  |  |
| DeliveryTime | DATETIME |  |  |
| Pricing | DECIMAL(18, 2) |  |  |
| Status | NVARCHAR(50) |  |  |

**6. QualityReports Table**

| **Field Name** | **Data Type** | **Key** | **Relationship** |
| --- | --- | --- | --- |
| ReportId | INT | PK |  |
| CarModelId | INT | FK | References **CarModels(ModelId)** |
| InspectionDate | DATETIME |  |  |
| InspectorId | INT | FK | References **Users(UserId)** |
| TestResults | NVARCHAR(MAX) |  |  |
| DefectsFound | NVARCHAR(MAX) |  |  |
| Status | NVARCHAR(50) |  |  |

**7. SalesOrders Table**

| **Field Name** | **Data Type** | **Key** | **Relationship** |
| --- | --- | --- | --- |
| OrderId | INT | PK |  |
| CustomerId | INT | FK | References **Customers(CustomerId)** |
| CarModelId | INT | FK | References **CarModels(ModelId)** |
| OrderDate | DATETIME |  |  |
| DeliveryDate | DATETIME |  |  |
| Price | DECIMAL(18, 2) |  |  |
| Status | NVARCHAR(50) |  |  |

**8. Customers Table**

| **Field Name** | **Data Type** | **Key** | **Relationship** |
| --- | --- | --- | --- |
| CustomerId | INT | PK |  |
| Name | NVARCHAR(100) |  |  |
| ContactDetails | NVARCHAR(MAX) |  |  |
| PurchaseHistory | NVARCHAR(MAX) |  |  |
| Status | NVARCHAR(50) |  |  |

**9. Finance Table**

| **Field Name** | **Data Type** | **Key** | **Relationship** |
| --- | --- | --- | --- |
| FinanceId | INT | PK |  |
| TransactionType | NVARCHAR(50) |  |  |
| Amount | DECIMAL(18, 2) |  |  |
| Date | DATETIME |  |  |
| Details | NVARCHAR(MAX) |  |  |

**10. Notifications Table**

| **Field Name** | **Data Type** | **Key** | **Relationship** |
| --- | --- | --- | --- |
| NotificationId | INT | PK |  |
| Type | NVARCHAR(50) |  |  |
| Message | NVARCHAR(MAX) |  |  |
| Timestamp | DATETIME |  |  |
| UserId | INT | FK | References **Users(UserId)** |