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**Table and Attribute Summaries(Version 4)**

Based on Conceptual Schema(Version 5)

The purpose is to create tables for all entities and relationships and detail the attributes.

Changes: Moved Exact Date attribute from the Assembly Card attribute table to the Order attribute table and renamed it to DateToFill.

**Part**

Table

|  |  |
| --- | --- |
| Table | Part |
| ER Origin | Part Entity |
| Primary Key | PartID |
| Foreign Keys |  |

Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Type | Default Value | Range | Req/Opt | Derived/Stored |
| PartID | INTEGER |  |  | Required | Stored |
| Name | VARCHAR(30) |  |  | Required | Stored |
| Unit Cost | FLOAT(12,2) |  | >0.00 | Required | Stored |

**Technician**

Table

|  |  |
| --- | --- |
| Table | Technician |
| ER Origin | Technician Entity |
| Primary Key | TechnicianID |
| Foreign Keys |  |

Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Type | Default Value | Range | Req/Opt | Derived/Stored |
| TechnicianID | INTEGER |  |  | Required | Stored |
| Name | VARCHAR(30) |  |  | Required | Stored |
| Street | VARCHAR(30) |  |  | Optional | Stored |
| City | VARCHAR(20) |  |  | Optional | Stored |
| State | CHAR(2) |  |  | Optional | Stored |
| Zip | VARCHAR(10) |  |  | Optional | Stored |

**Order**

Table

|  |  |
| --- | --- |
| Table | Order |
| ER Origin | Order Associative Entity |
| Primary Key | OrderID |
| Foreign Keys | CustomerID references Customer |
|  | PartID references Part |

Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Type | Default Value | Range | Req/Opt | Derived/Stored |
| OrderID | INTEGER |  |  | Required | Stored |
| CustomerID | INTEGER |  |  | Required | Stored |
| PartID | INTEGER |  |  | Required | Stored |
| OrderTotal | INTEGER |  | >=0 | Required | Derived |
| DateToFill | DATE |  |  | Optional | Stored |

**Assembly Card**

Table

|  |  |
| --- | --- |
| Table | Assembly Card |
| ER Origin | Assembly Card Entity |
| Primary Key | Card Number |
| Foreign Keys | OrderID references Order |

Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Type | Default Value | Range | Req/Opt | Derived/Stored |
| Card Number | INTEGER |  |  | Required | Stored |
| OrderID | INTEGER |  |  | Required | Stored |

**Customer**

Table

|  |  |
| --- | --- |
| Table | Customer |
| ER Origin | Customer Entity |
| Primary Key | CustomerID |
| Foreign Keys |  |

Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Type | Default Value | Range | Req/Opt | Derived/Stored |
| CustomerID | INTEGER |  |  | Required | Stored |
| Name | VARCHAR (30) |  |  | Required | Stored |
| Street | VARCHAR(30) |  |  | Required | Stored |
| City | VARCHAR(20) |  |  | Required | Stored |
| State | CHAR(2) |  |  | Required | Stored |
| Zip | VARCHAR(10) |  |  | Required | Stored |

**Supplier**

Table

|  |  |
| --- | --- |
| Table | Supplier |
| ER Origin | Supplier Entity |
| Primary Key | SupplierID |
| Foreign Keys |  |

Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Type | Default Value | Range | Req/Opt | Derived/Stored |
| SupplierID | INTEGER |  |  | Required | Stored |
| Name | VARCHAR(30) |  |  | Required | Stored |
| Street | VARCHAR(30) |  |  | Required | Stored |
| City | VARCHAR(20) |  |  | Required | Stored |
| State | CHAR(2) |  |  | Required | Stored |
| Zip | VARCHAR(10) |  |  | Required | Stored |

**Supply Shipment**

Table

|  |  |
| --- | --- |
| Table | Supply Shipment |
| ER Origin | Supply Shipment Associate Entity |
| Primary Key | SupplyID |
| Foreign Keys | SupplierID references Supplier |
|  | PartID references Part |

Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Type | Default Value | Range | Req/Opt | Derived/Stored |
| SupplyID | INTEGER |  |  | Required | Stored |
| Quantity | INTEGER |  |  | Required | Stored |
| SupplierID | INTEGER |  |  | Required | Stored |
| PartID | INTEGER |  |  | Required | Stored |

**Assembles**

Table

|  |  |
| --- | --- |
| Table | Assembles |
| ER Origin | Assembles Relationship |
| Primary Key | TechnicianID, PartID |
| Foreign Keys | TechnicianID references Technician |
|  | PartID references Part |

Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Type | Default Value | Range | Req/Opt | Derived/Stored |
| TechnicianID | INTEGER |  |  | Required | Stored |
| PartID | INTEGER |  |  | Required | Stored |

**Ships**

Table

|  |  |
| --- | --- |
| Table | Ships |
| ER Origin | Ships Relationship |
| Primary Key | SupplierID, SupplyID |
| Foreign Keys | SupplierID references Supplier |
|  | SupplyID references Supply Shipment |

Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Type | Default Value | Range | Req/Opt | Derived/Stored |
| SupplierID | INTEGER |  |  | Required | Stored |
| SupplyID | INTEGER |  |  | Required | Stored |

**Contains**

Table

|  |  |
| --- | --- |
| Table | Contains |
| ER Origin | Contains Relationship |
| Primary Key | PartID, SupplyID |
| Foreign Keys | PartID references Part |
|  | SupplyID references Supply Shipment |

Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Type | Default Value | Range | Req/Opt | Derived/Stored |
| PartID | INTEGER |  |  | Required | Stored |
| SupplyID | INTEGER |  |  | Required | Stored |

**BOM**

Table

|  |  |
| --- | --- |
| Table | BOM |
| ER Origin | BOM Relationship |
| Primary Key | CompositePart, ComponentPart |
| Foreign Keys | CompositePart references Part |
|  | ComponentPart references Part |

Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Type | Default Value | Range | Req/Opt | Derived/Stored |
| CompositePart | INTEGER |  |  | Optional | Stored |
| ComponentPart | INTEGER |  |  | Optional | Stored |

**Uses**

Table

|  |  |
| --- | --- |
| Table | Uses |
| ER Origin | Uses Relationship |
| Primary Key | TechnicianID, OrderID |
| Foreign Keys | Card Number references Assembly Card |
|  | OrderID references Order |

Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Type | Default Value | Range | Req/Opt | Derived/Stored |
| Card Number | INTEGER |  |  | Required | Stored |
| OrderID | INTEGER |  |  | Required | Stored |

**ForPart**

Table

|  |  |
| --- | --- |
| Table | For |
| ER Origin | For Relationship |
| Primary Key | PartID, OrderID |
| Foreign Keys | PartID references Part |
|  | OrderID references Order |

Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Type | Default Value | Range | Req/Opt | Derived/Stored |
| PartID | INTEGER |  |  | Required | Stored |
| OrderID | INTEGER |  |  | Required | Stored |
| Quantity | INTEGER |  | >=0 | Required | Stored |
| LineTotal | INTEGER |  | >=0 | Required | Derived |

**Places**

Table

|  |  |
| --- | --- |
| Table | Places |
| ER Origin | Places Relationship |
| Primary Key | CustomerID, OrderID |
| Foreign Keys | CustomerID references Customer |
|  | OrderID references Order |

Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Type | Default Value | Range | Req/Opt | Derived/Stored |
| CustomerID | INTEGER |  |  | Required | Stored |
| OrderID | INTEGER |  |  | Required | Stored |

**Creates**

Table

|  |  |
| --- | --- |
| Table | Creates |
| ER Origin | Creates Relationship |
| Primary Key | OrderID, Card Number |
| Foreign Keys | OrderID references Order |
|  | Card Number references Assembly Card |

Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Type | Default Value | Range | Req/Opt | Derived/Stored |
| OrderID | INTEGER |  |  | Required | Stored |
| Card Number | INTEGER |  |  | Required | Stored |