Complaints Management Service

Milestone: Logical Model

Study Group 19

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Percentage of Effort Contributed by Student1: 50%

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Submission Date: Oct 22, 2022

NOTE: All the foreign keys are in italics and the primary keys are underlined. The relations in RED are the relations which are mapped due to M:N cardinality.

RELATIONAL MODEL

→ SUPPLIER (<u>SupplierID</u>, Supplier_Name, Supplier_Address)

→ SUPPLIES (*SupplierID, MFGSiteNo)*

- *SupplierID* is a foreign key and it refers to SupplierID in the SUPPLIER relation. It cannot be NULL on update/delete cascade.
- *MFGSiteNo* is a foreign key and it refers to MFGSiteNo in the Manufacturing Site relation. It cannot be NULL on update/delete cascade.

→ ASSIGNED (*SupplierID*, *NCR#*)

- *SupplierID* is a foreign key and it refers to SupplierID in the SUPPLIER relation. It cannot be NULL on update/delete cascade.
- *NCR#* is a foreign key and it refers to NCR# in the NON-CONFORMANCE REPORT relation. It cannot be NULL on update/delete cascade.

→ NON-CONFORMANCE REPORT (<u>NCR#</u>, NCR_Date_Created, Field Action)

→ REPORTS (*MFGSiteNo, NCR#)*

- *MFGSiteNo* is a foreign key and it refers to MFGSiteNo in the Manufacturing Site relation. It cannot be NULL on update/delete cascade.
- *NCR#* is a foreign key and it refers to NCR# in the NON-CONFORMANCE REPORT relation. It cannot be NULL on update/delete cascade.

→ MANUFACTURING SITE (<u>MFGSiteNo</u>, MFG_Address, MFG_Site_Name)

→ DISTRIBUTES (*MFGSiteNo, DistributorID)*

- *MFGSiteNo* is a foreign key and it refers to MFGSiteNo in the Manufacturing Site relation. It cannot be NULL on update/delete cascade.
- *DistributorID* is a foreign key and it refers to DistributorID in the DISTRIBUTOR relation. It cannot be NULL on update/delete cascade.

→ DISTRIBUTOR (<u>DistributorID,</u> DistributorName, DistributorAddress, DateReceived)

→ STORES (*DistributorID, ProductID)*

- *DistributorID* is a foreign key and it refers to DistributorID in the DISTRIBUTOR relation. It cannot be NULL on update/delete cascade.
- *ProductID* is a foreign key and it refers to ProductID in the PRODUCT relation. It cannot be NULL on update/delete cascade.

→ PRODUCTS (ProductID, ProductName, ProductMFGDate, ProductLotNumber)

→ CUSTOMER (CustomerID, CustomerAccountCreationDate)

→ SELLS (*DistributorID, CustomerID)*

- *DistributorID* is a foreign key and it refers to DistributorID in the DISTRIBUTOR relation. It cannot be NULL on update/delete cascade.
- *CustomerID* is a foreign key and it refers to CustomerID in the CUSTOMER relation. It cannot be NULL on update/delete cascade.

→ END-USER (EndUserID, EndUserName, EndUserAddress, *CustomerID*)

- *CustomerID* is a foreign key and it refers to CustomerID in the CUSTOMER relation. It cannot be NULL on update/delete cascade.

→ CUSTOM ORDER (CO_ID, CO_Ordered, CO_Specs, CO_Mfg, CO_Delivered, *EndUserID, MFGSiteNo*)

- *EndUserID* is a foreign key and it refers to the EndUserID in the End-User relation. It cannot be NULL on update/delete cascade.
- *MFGSiteNo* is a foreign key and it refers to MFGSiteNo in the Manufacturing Site relation. It cannot be NULL on update/delete cascade.

→ HOSPITAL (HospitalID, HospitalName, HospitalAddress, *CustomerID)*

- *CustomerID* is a foreign key and it refers to CustomerID in the CUSTOMER relation. It cannot be NULL on update/delete cascade.

→ COMPLAINT (ComplaintID, Complaint Description, *CustomerID*)

- *CustomerID* is a foreign key and refers to CustomerID in the relation CUSTOMER. NULL NOT ALLOWEDon Update/Delete cascade.