**Parent Table: Catalogs**

This is the central table that holds catalog-level metadata.

CREATE TABLE Catalogs (

catalog\_id INT PRIMARY KEY,

supplier\_id INT,

catalog\_name VARCHAR(100),

status ENUM('Draft', 'Submitted', 'Approved', 'Rejected'),

submission\_date DATETIME,

approval\_date DATETIME,

created\_at DATETIME,

updated\_at DATETIME

);

**Child Tables Linked to Catalogs**

**1. CatalogItems – Items listed under each catalog**

CREATE TABLE CatalogItems (

item\_id INT PRIMARY KEY,

catalog\_id INT,

item\_name VARCHAR(100),

description TEXT,

category VARCHAR(50),

unit\_of\_measure VARCHAR(20),

FOREIGN KEY (catalog\_id) REFERENCES Catalogs(catalog\_id)

);

**2. ItemPricing – Price details per item**

CREATE TABLE ItemPricing (

pricing\_id INT PRIMARY KEY,

item\_id INT,

price DECIMAL(10,2),

currency VARCHAR(10),

effective\_from DATE,

effective\_to DATE,

FOREIGN KEY (item\_id) REFERENCES CatalogItems(item\_id)

);

**3. ItemAvailability – Stock and availability status**

CREATE TABLE ItemAvailability (

availability\_id INT PRIMARY KEY,

item\_id INT,

available\_quantity INT,

lead\_time\_days INT,

is\_active BOOLEAN,

FOREIGN KEY (item\_id) REFERENCES CatalogItems(item\_id)

);

**4. ItemAttachments – Supporting documents or images**

CREATE TABLE ItemAttachments (

attachment\_id INT PRIMARY KEY,

item\_id INT,

file\_name VARCHAR(255),

file\_type VARCHAR(50),

uploaded\_at DATETIME,

FOREIGN KEY (item\_id) REFERENCES CatalogItems(item\_id)

);

**5. CatalogAuditTrail – Change history and approvals**

CREATE TABLE CatalogAuditTrail (

audit\_id INT PRIMARY KEY,

catalog\_id INT,

action VARCHAR(50),

performed\_by INT,

timestamp DATETIME,

remarks TEXT,

FOREIGN KEY (catalog\_id) REFERENCES Catalogs(catalog\_id)

);

**Optional Relationship Tables**

**ItemCategoryMaster – Standardized categories**

CREATE TABLE ItemCategoryMaster (

category\_id INT PRIMARY KEY,

category\_name VARCHAR(100),

description TEXT

);

Used for validation and dropdowns in CatalogItems.category.

**Summary of Relationships**

| **Parent Table** | **Child Table** | **Relationship Type** |
| --- | --- | --- |
| Catalogs | CatalogItems | One-to-Many |
| CatalogItems | ItemPricing | One-to-Many |
| CatalogItems | ItemAvailability | One-to-One |
| CatalogItems | ItemAttachments | One-to-Many |
| Catalogs | CatalogAuditTrail | One-to-Many |