Database Design Document

Overview

This document outlines the database schema for managing CSV file uploads, product processing, and image storage. The schema consists of two primary tables: requests and products. The system ensures data integrity and supports efficient tracking of uploaded files and processed products.

Tables & Relationships

Requests Table (Tracks CSV Uploads)

- **Purpose:** Stores the request id after every CSV file upload and their processing status.
- Primary Key: id
- Columns:
 - o id (UUID, Primary Key, Auto-generated)
 - status(ENUM('PENDING', 'COMPLETED'), Default: 'PENDING')
 - createdAt (TIMESTAMP, Auto-generated)
 - updatedAt (TIMESTAMP, Auto-updated)

Products Table (Stores Products from CSV)

- **Purpose:** Stores product details extracted from CSV uploads.
- Primary Key: id
- Columns:
 - ∘ serialNumber (INTEGER, Not Null) → Unique identifier from the CSV file
 - $\circ \quad \text{requestId} \; (\text{UUID}, \text{Foreign Key} \rightarrow \text{requests.id}) \rightarrow \text{Links to the upload request}$
 - o productName (STRING, Not Null) → Name of the product
 - inputImageUrls (TEXT, Nullable) → Stores input image URLs as a commaseparated string
 - outputImageUrls (TEXT, Nullable) → Stores processed output image URLs
 - createdAt (TIMESTAMP, Auto-generated)
 - updatedAt (TIMESTAMP, Auto-updated)