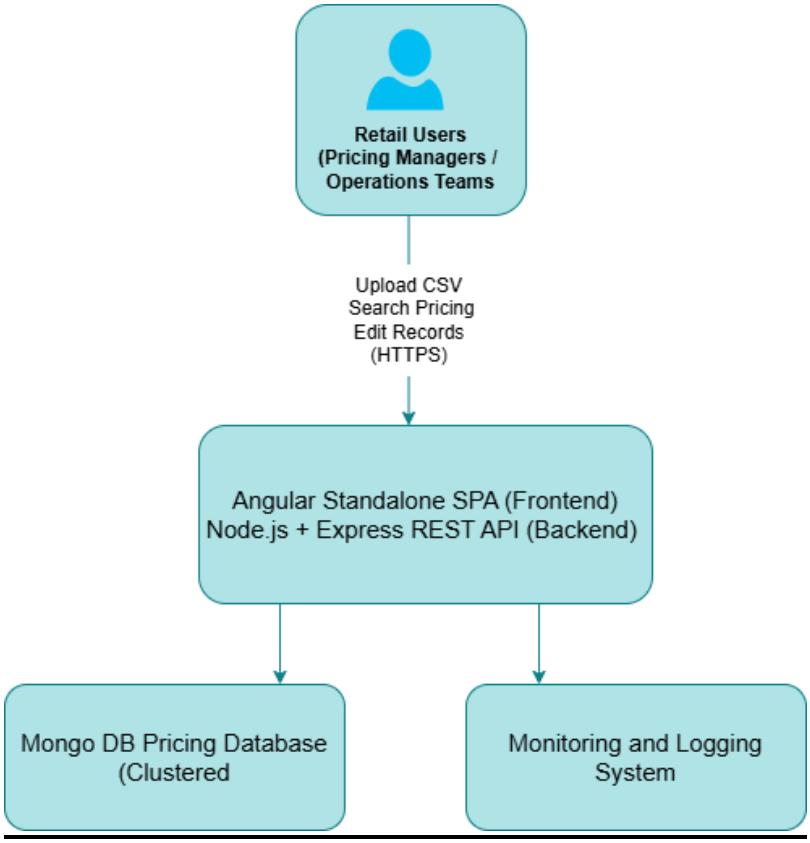
Context Diagram:



The above Diagram represents the high-level interaction between external users and the Retail Pricing Management System. Retail users interact with the Angular-based Single Page Application to upload CSV pricing feeds, search records, and update pricing information. The Node.js backend processes requests, validates input, and persists data in MongoDB. A logging mechanism captures operational and error logs to support monitoring and maintain system reliability.

External Entities

1. Retail Store Users

- Pricing Managers
- Operations Team
- Admin Users

They can Upload pricing feeds (CSV), search pricing records, edit and update pricing data

2. MongoDB Database

- Stores pricing records
- Indexed for fast search
- Configured for replication & high availability
- Supports scaling for 3000 stores

3□. Data Flow Description

i. CSV Upload Flow

- User → Angular UI → Node.js API → MongoDB
- Response → UI → User confirmation

ii. Search Flow

- User → Angular UI → Node.js API → MongoDB
- Filtered results → UI grid display

iii. Update Flow

- User edits → Angular form → Node API → MongoDB
- Success response → UI update