

## **Database Design Document: Store Price Tracking Application**

### **Problem Description: (Nouns, Verbs)**

In neighborhoods or cities without online platforms, users find it challenging to identify the store selling specific items at the most affordable prices. The solution is to develop a web-based application where users can contribute prices for common items when visiting various stores. The app enables users to view prices per unit for each store, aiding them in making informed decisions about where to shop. The application incorporates crowdsourced price tracking for offline stores.

### **Rules:**

1. Each location can have more than one store.
2. There are multiple locations.
3. Customers can contribute to the list of items.
4. Each item is categorized into one category.
5. One category can encompass multiple items.
6. Each store has at least one location.
7. Multiple stores can have the same name but different locations.
8. Each item has a specific price in one store.
9. Many stores can have the same item with the same/different prices.
10. Each store is associated with an expense rating.
11. Users can filter items by expense rating, category, specialty, etc.
12. A store cannot carry multiple quantities of the same item with different prices.
13. The application should track the timestamp of when a price is contributed.
14. Users can update the price of an item at a location.
15. Stores may or may not have a cultural specialty.

### **Important Nouns:**

User  
Contributor  
Reviewer  
Item  
Category  
Price  
Store  
Location  
Expense Rating  
Cultural Specialty  
Crowdsourced  
Price Tracking

### **Important Verbs:**

Contribute

View  
Discover  
Filter  
Categorize  
Contribute  
View  
Track geolocation  
Assign expense rating  
Associate cultural specialty  
Contribute prices  
View prices  
Record prices