Store Sales Optimization

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Summary
A Point-of-Sale Application that can help any store manager optimize their sales.

Utilizing various methods of sorting, we will both build a quick, functional UI to browse data, and ways to analyze and sort it to make sure the most money is being made for a store owner.

Data Structures:
Arrays, Linked Lists, Heaps, etc.

These will be used to collect and store our data. We plan to have keys for product ID numbers, a literal text string describing the product, and an integer price for the item. We will also have sales data describing how much of a particular item was sold, the profit margins on each, and other useful information to analyze how well keeping stock of an item is.

ID	String	Purchase Price	Sales Price	Profit	Volume Sold
1015	Head of Lettuce	$0.49	$1.49	$1.00	5,000/month

Sorting Algorithms:
Bubble Sort, QuickSort, MergeSort, Binary Trees, etc.

Sorting algorithms can be used to sort data of items in the store. In addition to the basic sorting of ID numbers, alphabetical order, and price, we will also make use of this analyzation to determine the most cost-effective and popular items in the store. For example, we will be able to find out the best-selling item and if it is feasible to raise or lower the price on it. We can also find the item that produces the most net-profit, even if it doesn't sell all that many units every month.

With this data in hand, we can help any store owner optimize and manage their store to keep in stock only the most profitable items.

Schedule
Week 1: Outline project
Week 2-4: Plan work, pseudo-code, design functionality/usage
Week 4+: Programming, Testing