

# CheapBuy 2.0 REVOLUTIONIZING ONLINE SHOPPING

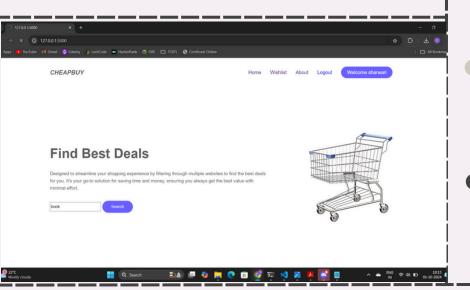


CheapBuy is a user-friendly platform designed to enhance your online shopping experience. It streamlines the process of comparing prices for the same product across various popular retailers, including Amazon, Walmart, eBay, BJ's, Costco, and more. With features like user accounts and personalized wishlists, CheapBuy allows you to easily filter and select products from multiple websites at once. This efficient approach not only saves you time and money but also provides the added convenience of personalized features, making CheapBuy the ultimate destination for discovering the best online deals.



#### **Test Case addition**

- 1. Verify that product recommendations match the user's shopping habits.
- 2. Check if users can successfully create and log into their accounts.
- 3. Verify that the search function returns relevant products based on user queries.
- 4. Test the accuracy of price comparisons across multiple platforms to ensure the lowest price is displayed.



## **Features**

#### **USER ACCOUNTS**

CheapBuy provides a personalized shopping experience through user accounts. Users can create their profiles, which allow them to save their preferences and manage their wishlists. This feature ensures that users can easily access their favorite products and track their shopping history, making their online shopping journey more tailored and efficient.

#### **ENHANCED USER INTERFACE**

The platform boasts an intuitive and visually appealing design that simplifies navigation. With a focus on user experience, the enhanced UI allows shoppers to browse effortlessly. Clear categories, easy-to-read fonts, and an organized layout help users find products quickly

#### **PERSONAL WISHLISTS**

Users can easily create and manage personalized wishlists to keep track of desired items. This feature enables shoppers to curate lists of products they're interested in, making it easy to revisit and purchase items later.

#### ADVANCED FILTER OPTIONS

CheapBuy allows users to search across multiple retail websites simultaneously and apply various filters to refine their results. Users can filter products based on criteria such as price, ratings, brand, and availability.

#### **COMPREHENSIVE PRICE COMPARISONS**

With CheapBuy, users can instantly compare prices for the same product across popular retailers like Amazon, Walmart, eBay, BJ's, and Costco. Teir money.

# Methodolgy

#### 1. Web Scraping

Extract product details (prices, descriptions, URLs) from various ecommerce websites (Amazon, Walmart, eBay, BJ's, Costco, etc.). Handle exceptions and optimize scraping performance using multithreading and multiprocessing.

#### 2. Data processing

Analyze scraped data to extract meaningful information like product comparisons and price trends. Filter data based on user preferences, such as price range or selected retailers.

#### 3. User Interface Development

Design a clean and intuitive interface for both the browser extension and standalone website. Implement features like product highlighting, search filters, and personalized wishlists.

#### 4. Backend Development and Feature Integration

Develop and deploy a scalable server API on AWS to handle web scraping requests and process product data. Integrate user accounts, wishlist management, and realtime price comparisons, ensuring users can view the cheapest product across multiple platforms.



# Key Upgrades in current project

#### 1. Web Scraping

The upgraded version features a more user-friendly design, allowing for easier navigation and improved visual appeal. This makes it simpler for users to find and compare products across multiple websites.

#### 2. Expanded Product Range

This Version introduces new e-commerce platforms such as Best Buy, Trader Joe's, and Kroger, broadening the selection of products and price comparisons available to users.

#### 3. Account Management Features

Users can now create accounts, manage personal wishlists, and receive personalized product suggestions based on their browsing history, providing a tailored shopping experience.

#### 4. Increased Web Scraping Efficiency

The latest version employs advanced scraping techniques and optimizations, improving the speed and accuracy of data retrieval from various websites, ensuring that users receive the best price comparisons in real time.

## **Future scope**

#### l1. Al-Driven Recommendations

Introduce machine learning algorithms that analyze user behavior, sand preferences to provide personalized product recommendations. By leveraging AI, CheapBuy can offer smart suggestions for deals, alternative products, and items that align with the user's interests

#### 2. Price Tracking and Historical Data Insights

Develop a price tracking system that monitors price fluctuations over time for specific products. Users would be able to see historical price trends and get insights on the best time to make a purchase.

### 3. User-Generated Reviews and Ratings

Introduce a user review and rating system where shoppers can leave feedback on products they've purchased through CheapBuy. By incorporating verified reviews and ratings, users can make more informed decisions based on the experiences of others