

Silocloud, Amazon and Flipkart Price Tracker

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Abstract—The Silocloud, Amazon, and Flipkart Price Tracker Mega Project is designed to provide real-time price monitoring and comparison across multiple e-commerce platforms, including Amazon and Flipkart. This project aims to help users make informed purchasing decisions by tracking price fluctuations, identifying discounts, and notifying users of the best deals available.

The system leverages advanced web scraping techniques and APIs to collect dynamic pricing data from Amazon, Flipkart, and Silocloud. Data is processed using efficient algorithms to analyze trends, detect price drops, and generate comparative insights. Users can track specific products, set price alerts, and receive notifications via email or mobile applications when prices meet their desired thresholds.

I. INTRODUCTION

This project aims to create a web-based platform to track the prices of products on Amazon, Flipkart and Silocloud. Users can monitor product prices, receive alerts when prices drop, and view historical price trends, helping them make informed purchasing decisions and save money.

Build a user-friendly web platform for price tracking. Implement web scraping to gather real-time product prices.

Provide users with notifications when prices drop. Allow users to view price history and trends. Algorithm to predict future discounts on products. Ensure data accuracy and performance optimization.

II. PROBLEM DEFINITION

E-commerce platforms like Amazon and Flipkart offer dynamic pricing, where product prices fluctuate due to demand, competition, and promotions. Consumers and businesses often struggle to track these changes, missing out on potential discounts or overpaying for products.

Currently, there is no centralized, automated system that efficiently monitors, records, and notifies users about price changes across these platforms. Manual tracking is time-consuming, inefficient, and prone to errors.

Objectives:

- 1..Automate price tracking – Continuously monitor prices of selected products on Amazon and Flipkart.
- 2.Data storage & analytics – Store historical price data for analysis and trend prediction.
- 3.Real-time alerts – Notify users via email, SMS, or app notifications when prices drop.
- 4.Comparison tool – Allow users to compare prices across multiple platforms to find the best deals.
- 5.Scalability & reliability – Ensure the system can handle multiple product tracking requests efficiently.

III. FEATURES

- User Authentication and Account Management.
- Real-time Price Tracking for Silocloud, Amazon and Flipkart products.
- Email and Push Notifications for price drops.
- Product Search and Wishlist functionality.
- Price History Graphs and Trends.

IV. TECHNICAK STACK

- Frontend: HTML, CSS, JavaScript, Bootstrap.
- Backend: Python (Flask/Django), REST APIs.

- Web Scraping: BeautifulSoup, Selenium, Web API's.
- Database: MongoDB or MySQL.
- Hosting: Dedicated server and Plesk Panel.

V. SYSTEM ARCHITECTURE

- The system architecture involves:
 - 1 Frontend: User interface for interacting with the platform.
 - 2 Backend: Handles requests, user authentication, and communicates with the scraper.
 - 3 Scraper: Extracts product prices from Amazon and Flipkart.
 - 4 Database: Stores user data, product details, and price history.
 - 5 Notification Service: Sends alerts to users based on their preferences.

VI. WEB SCRAPING

Web scraping involves extracting data from websites like Amazon and Flipkart. We use tools like BeautifulSoup and Selenium to automate the process. Challenges include handling anti-scraping measures like CAPTCHAs, rotating proxies, and maintaining data accuracy and consistency.

VII. CHALLENGES

- Anti-scraping measures implemented by Amazon and Flipkart.
- Ensuring data accuracy and real-time updates.
- Handling large-scale scraping without getting blocked.
- Optimizing performance and response times.

VIII. SCOPE

The scope of the Sliocloud Amazon and Flipkart Price Tracker Mega Project involves tracking and analyzing product prices from Amazon and Flipkart, providing users with insights, alerts, and historical price trends.

IX. CONCLUSION

The Amazon and Flipkart price tracker helps users save money by monitoring product prices and notifying them of price drops. The project addresses real-world challenges of web scraping, data accuracy, and performance optimization, providing a valuable tool for smart shopping.