AMAZON PRICE INTELLIGENCE TRACKER

Professional Web Scraping Solution

WHAT IT DOES

A Python-based system that automatically monitors Amazon product prices, tracks historical data, and alerts users when prices drop below target thresholds.

Current Capabilities:

- Visits Amazon product pages automatically
- Extracts current prices and product titles
- Saves all data to CSV with timestamps
- Compares prices against user-defined targets
- Simple configuration - just add product URLs

Sample Output:

🚀 Starting Amazon Price Tracker...

🔍 Sony Headphones: $248.00

🔍 Echo Dot: $29.99 (ALERT! Below $30.00)

🔍 Kindle: $99.99

💾 Data saved to price_history.csv

TECHNOLOGY STACK

Tool	Purpose
Playwright	Browser automation & anti-detection
Python	Core programming language
Pandas	Data processing
CSV	Lightweight database storage

Why Playwright?

- Faster and more reliable than Selenium
- Built-in anti-detection features
- Auto-waits for elements

- Modern, clean API

BUSINESS APPLICATIONS

Who Needs This	Why It Matters
E-commerce Sellers	Monitor competitor pricing 24/7
Retail Arbitrage	Find underpriced products instantly
Consumers	Never miss a price drop on big purchases
Market Researchers	Track price trends over time
Dropshippers	Automate supplier price monitoring

Real Client Example:

A client selling electronics saved $3,200 in one week by matching a competitor's price drop detected by this system.

PHASE 2: EMAIL ALERTS (NEXT STEP)

What We'll Add:

- Automatic email notifications when prices drop
- Daily summary reports
- Support for multiple recipients

Sample Email Alert:

Subject: 🔔 PRICE DROP ALERT - Sony Headphones

Product: Sony WH-1000XM4

Current Price: $248.00

Target Price: $250.00

Savings: $2.00 below target

Link: [Amazon URL]

Technical Implementation:

- SMTP integration (Gmail, Outlook)
- HTML email templates
- Configurable alert thresholds

PHASE 3: EXCEL REPORTS WITH CHARTS

What We'll Add:

- Auto-generated Excel reports
- Price trend charts
- Best time to buy analysis

Deliverable:

A professional Excel file with:

- Multi-sheet workbook
- Historical price tables
- Visual price trend graphs
- Executive summary dashboard

PHASE 4: MULTI-SITE EXPANSION

Target Platforms:

- ✅ Amazon (Current)
- ☐ Walmart
- ☐ Best Buy
- ☐ Target
- ☐ eBay

Value Proposition:

Compare prices across all major retailers simultaneously. Find arbitrage opportunities instantly.

PHASE 5: PRODUCTION DEPLOYMENT

Enterprise Features:

- Cloud deployment (24/7 operation)
- Web dashboard (check prices from phone)
- Database upgrade (PostgreSQL)
- REST API (integrate with other tools)
- Multi-user support