

Abstract

Flipkart Product Tracker

Team Members

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What is the project about and it's domain

The project is a customer tool for e-commerce commodity purchase that monitors price, reviews and other user-oriented attribute changes of a product from a list of websites and alerts the user. The idea behind choosing this project is to make a relevant tool for customers to purchase items at a good price and let them monitor the product's price, availability, rating, etc. Also, it can be used to gauge the market price for their commodity which is quoted by the e-commerce websites like Flipkart, snapdeal, shopclues and many more. This part can be more of an extension which can be further worked upon as time permits. The domain is web scraping and database management of the data obtained via web scraping.

Libraries Used

We'll be using requests, beautiful soup, pandas, smtplib, Tkinter and matplotlib (If time allows).

Brief walkthrough

The GUI will enable the user to enter product page links and populate the csv database with the list of products for monitoring. The user also has the option to enter links to product sections and a page number upto which all products will be listed. The user can then arrange them according to price/rating and select the ones to monitor. These will be added to the csv database. The script sends a get request every three hours for the entries of the database and checks for change, updates and sends an email alert if change is detected. The multiple platform product search will be done similarly. The user will get the list of products from the websites and can then choose to sort them according to price/rating and select the ones to monitor.

Rough timeline for two weeks

1. We'll be using libraries like requests and beautiful soup for fetching and parsing the data.
2. The data will be cleaned and sorted using python

3. Data will be analysed using a choice based conjoint algorithm to simultaneously check for all the attributes and provide the most customer preferred suggestion of product and its ecommerce websites
4. The outer packaging will be done using Tkinter

What other things you need to learn

1. Requests
2. Beautiful soup for fetching and parsing the data
3. Basic HTML for web scraping
4. Learning how to make GUI with Tkinter

Rough timeline for two weeks

We'll be learning beautiful soup and making scrapers for the websites first. This will be followed by dynamic updating and data analysis. Finally we'll wrap it in a GUI developed using Tkinter.

Project motivations

We wanted to do something relevant in terms of market transparency especially in the prices of commodities. The objective is to monitor the prices of commodities along with its quality through e-commerce websites, so that customers can make smart purchases for desired commodities. This can also be used by farmers to keep track of the market price of certain commodities of interest. Although it seems a little ambitious, this can be a small sample of what can be a tool to monitor large commercial transactions and make educated choices for trade. After discussing ideas we thought a tool for online purchases sounded good.

References

[Beautiful Soup Documentation — Beautiful Soup 4.4.0 documentation \(beautiful-soup-4.readthedocs.io\)](https://beautiful-soup-4.readthedocs.io)

[Requests: HTTP for Humans™ — Requests 2.25.1 documentation \(python-requests.org\)](https://python-requests.org)

[Geeksforgeeks Dynamic web scraping](#)