DESIGNING A WISH LIST AND PRICE COMPARISON PLATFORM FOR SMART SHOPPING DECISIONS

[1]M.Mounika, [2]Gatla Varshitha

[1]Assistant Professor,[2]MCA Student

Depatment Of MCA

Sree Chaitanya College of Engineering, Karimnagar

ABSTRAT:

Price comparison websites are made to assist customers pick things that would save them money online by comparing the costs of goods and services from various suppliers. The majority of clients prefer to purchase their necessities online since it saves them time, especially those who live in urban areas and have hectic lifestyles. Additionally, buyers always choose the lowest price when making purchases, thus by using price comparison websites, they may compare prices for the same goods without having to visit many stores. They may determine where to get the necessary goods by simply checking it on the price comparison website. Customers may find fantastic discounts on things at this project, which is called Price4You. The finest offers will be prominently displayed. Web crawlers and web scraping techniques are used to retrieve extensive information from price comparison websites in order to find the best bargains. In this sense, the paper seeks to provide online shoppers a means to purchase goods at a discount and preserve their precious time, energy, and cash.

I. INTRODUCTION

Cost comparison services, which provide consumers with information and values to compare costs across several online purchasing sites, have become more well-known as e-commerce has grown. By assisting consumers in making well-informed purchasing decisions, these websites help them save time and money. Usually, price comparison is accomplished by manually comparing the costs of the same goods from several online retailers, which may be time-consuming and cumbersome. A number of websites compare prices, but none do so for things on wish lists. We created the Wish List Products Price Comparison Website as a solution to this problem, which just examines the prices of the products the customer intends to buy. The website alerts users when a product's price changes and allows them to compare prices on this site with those on other e-commerce sites. It is quite helpful for people who often shop online and wish to compare prices from several online merchants in one location. By showing product prices from many suppliers, this method helps customers locate the best deal on the items they desire.

Ecommerce has grown to be a sizable industry for consumers to purchase items online in the present era of online business. Customers may now purchase goods virtually anywhere thanks to the growing usage of smart devices and other channels. Online purchasers' engagement in the developing e-commerce industry has expanded as a result. Users are confused by the sheer volume of e-commerce websites and are forced to look through many of them before deciding to purchase a single item. Using a single web interface, the suggested method enables online shoppers to find the

cheapest price for their item across several e-commerce websites. Users won't have to waste time, money, or effort looking for the same product pricing across other e-commerce websites thanks to this. The suggested solution employs a web crawler to find product connections and a web scraping approach to gather data from e-commerce websites. This page also has a price alert tool that users may configure to get notifications from the website anytime a relevant price is available. The following technologies are utilised by this system:

Price comparison engines are a part of the system. The initial requirement is to collect a lot of data from various e-commerce websites. Manually gathering data from websites is not feasible. Therefore, building a web crawler that can access these e-commerce websites is the best course of action. The scrapper receives the retrieved URLs to begin the scraping operation.

Extracting HTML data from URLs and using it for one's own purposes is known as web scraping. Data is scraped from several e-commerce websites because this is a price comparison website. In this system, Python modules like as requests and beautifulsoup4 are used for scraping. A Python module called Beautifulsoup4 is used to parse HTML pages. These are used to scrape and store product data from various e-commerce websites in a database.

An amazing website for comparing the prices of wish list products that makes it simple to establish and manage wish lists, keep track of product pricing, and make informed decisions. Our program makes finding deals easier.

The **several key features of wish list products price comparison website report**.

Online bio creation. Items, wish lists, and favorites may be saved. Update wish lists. Classify requests to remember why. Buyers wanted clothing, toys, and décor online. A catalogue facilitates product and wish lists.

Price monitoring and alerts are its key tasks. App should notify wish listers of price changes. Online People who shop must compare prices quickly. Price, sending goods, and sales should be obvious.

User ratings and lists of boost product reviews. You may comment on reviews. Related items and ideas: Customers may locate adding on goods using rules for. Prices and availability vary. Email, push. Mobile-friendly web pages should operate on phones.

Online companies benefit from ads. Stores may sell online. User data must be secure. Privacy may be achieved by encryption, user permission before data gathering, and other techniques. Profit Strategy Upgrades, advertisements, and monthly services create money. E-commerce and advertising partnerships may help. motivate. Statistics & Info Track site traffic, product sales, and other data using tracking user experience. **Marketing and Search Engine Optimization (SEO),** is to get people to use your service, make a plan. SEO is important if you want your website to do well in search engines and get visitors from other web pages.

PROBLEM STATEMENT:

As consumers increasingly rely on online shopping platforms, the need for a comprehensive and user-friendly wish list products price comparison website has become evident. However, existing challenges in the online shopping landscape

hinder users' ability to make informed purchasing decisions. These challenges include the lack of a centralized platform to compare prices across various online retailers, difficulty in tracking price fluctuations for desired items, and a fragmented user experience when managing wish lists across multiple platforms.

Consumers often face the inconvenience of visiting multiple websites to compare prices for the same product and may miss out on potential discounts or promotions due to the absence of a unified system for wish list management and price tracking. Additionally, the lack of real-time updates and reliable information on historical price data makes it challenging for users to strategize and optimize their purchases.

Furthermore, users may be concerned about the security of their data and the potential misuse of personal information when using various platforms. The absence of a centralized, secure, and user-centric solution poses a significant obstacle to enhancing the online shopping experience.

Therefore, the existing problem revolves around the inefficiency and inconvenience faced by online shoppers in comparing prices, tracking wish lists, and obtaining reliable information to make informed purchasing decisions. Addressing these challenges requires the development of a dedicated wish list products price comparison website that offers a unified, secure, and user-friendly experience for consumers navigating the complexities of online retail.

II. LITERATURE SURVEY:

Pang, B., Lee, L. and Vaidyanathan, "S.Thumbs up? sentiment classification using machine learning techniques,"

With advances in Web technologies, more and more people are turning to popular social media platforms such as Twitter to express their feelings and opinions on a variety of topics and current issues online. Sentiment analysis of Web data is becoming a fast and effective way of evaluating public opinion and sentiment for use in marketing and social behavioral studies. This research investigates the enhancement techniques in machine-learning methods for sentiment classification of Web data. Feature selection, negation dealing, and emoticon handling are studied in this paper for their ability to improve the performance of machine-learning methods. The range of enhancement techniques is tested using different text data sets, such as tweets and movie reviews. The results show that different enhancement methods can improve classification efficacy and accuracy differently.

Hu, M. and Liu, B, " Mining opinion features in customer reviews,"

It is a common practice that merchants selling products on the Web ask their customers to review the products and associated services. As e-commerce is becoming more and more popular, the number of customer reviews that a product receives grows rapidly. For a popular product, the number of reviews can be in hundreds. This makes it difficult for a potential customer to read them in order to make a decision on whether to buy the product. In this project, we aim to summarize all the customer reviews of a product. This summarization task is different

from traditional text summarization because we are only interested in the specific features of the product that customers have opinions on and also whether the opinions are positive or negative. We do not summarize the reviews by selecting or rewriting a subset of the original sentences from the reviews to capture their main points as in the classic text summarization. In this paper, we only focus on mining opinion/product features that the reviewers have commented on. A number of techniques are presented to mine such features. Our experimental results show that these techniques are highly effective.

J., Marx, M.J, Mokken, R.J. and Rijke, M ,"Using word net to measure semantic orientations of adjectives,"

Current WordNet-based measures of distance or similarity focus almost exclusively on WordNet's taxonomic relations. This effectively restricts their applicability to the syntactic categories of noun and verb. We investigate a graph-theoretic model of WordNet's most important relation---synonymy---and propose measures that determine the semantic orientation of adjectives for three factors of subjective meaning. Evaluation against human judgments shows the effectiveness of the resulting measures.

Kim, S.M. and Hovy, E," Determining the sentiment of opinions,"

Identifying sentiments (the affective parts of opinions) is a challenging problem. We present a system that, given a topic, automatically finds the people who hold opinions about that topic and the sentiment of each opinion. The system contains a module for determining word sentiment and another for combining sentiments within a sentence. We experiment with various models of classifying and combining sentiment at word and sentence levels, with promising results.

An overview on web scraping techniques and tools AV Saurkar, KG Pathare, SA Gode –

From the evolution of WWW, the scenario of internet user and data exchange is fastly changes. As common people join the internet and start to use it, lots of new techniques are promoted to boost up the network. At the same time, to enhance computers and network facility new technologies were introduces which results into automatically decreasing in cost of hardware and website's related costs. Due to all these changes, large number of users are joined and use the internet facilities. Daily use of internet case in to a tremendous data is available on internet. Business, academician, researchers all are share their advertisements, information on internet so that they can be connected to people fastly and easily. As a result of exchange, share and store data on internet, a new problem is arise that how to handle such data overload and how the user will get or access the best information in least efforts. To solve this issues, researcher spot out new technique called Web Scraping. Web scraping is very imperative technique which is used to generate structured data on the basis of available unstructured data on the web. Scraping generated structured data then stored in central database and analyze in spreadsheets. Traditional copy-and-paste, Text grapping and regular expression matching, HTTP programming, HTML

parsing, DOM parsing, Web scraping software, Vertical aggregation platforms, Semantic annotation recognizing and Computer vision web-page analyzers are some of the common techniques used for data scraping. Previously most user uses the common copy-pest technique for gathering and analyzing data on the internet, but it is a tedious technique where lot of data copied by the user and store on computer files. As compared to this technique web scraping software is easiest scraping technique. Now a days, there are lots of software are available in the market for web scraping. Our paper is focused on the overview on the information extraction technique i.e. web scraping, different techniques of web scraping and some of the recent tools used for a web scraping.

The use of web scraping in computer parts and assembly price comparison

Authors :- Leo Rizky Julian , Friska Natalia

If originally computers were used only as a tool to perform some calculations, nowadays computers has a lot of functions to help people finish their tasks in almost every aspect of human life. As a lot of various functions computers have, they also need different specifications for each computer so they can do their tasks according to their functionalities. Therefore this application was build with a purpose to recommend a solution to its users in assembling computes suited to their needs. This application also has a price comparison feature based on data sources retrieved from five computer shops so the users can save the costs of purchasing PC parts and assembling the computer easier. This comparison feature is based on a basic consumer's principal which are basically they wanting to buy items not only with the lowest price but also expect the best quality as possible. The research starts with the deployment of questionnaires to some respondents who had bought computer parts or assembled a computer online. This questionnaire is made to assure that all features which previously has been specified by the author is appropriate to user needs. Then, in order to obtain required data from five computer shops, the author use Pentaho Software as a tool to do web scraping and web grabbing method. These methods allow the application to obtain data from those five computer shops. The result of this research is a web-based application built in PHP and javascript with MySQL as its database.

Web scraping for unstructured data over web GN Chandrika, S Ramasubbareddy, K Govinda

The need and significance for extracting information from the web is rising up with an increasing trend. Almost every day, we end up in a circumstance, where we need to extract information from the web. This is not always about finding new courses, but we also have to prone for reviews and data for providing a brief about them. Mostly, the issue is how we scrap the data and store it, but not on the strategy we use to perform it. The project done here is a proof of concept for how we could integrate it with php to make the updating by running python on the server. Here, we are going to use the python script to extract the info from a website and parse it to get the required information regarding our needs. Then, the data is send to the webserver hosted on the internet, the php running on the server will get the data

from the python script. The data is been store on the mysql server using the php script and every time, we run the python, the data in the website changes. © Springer Nature Singapore Pte Ltd. 2020.

III. SYSTEM ANALYSIS & DESIGN

EXISTING SYSTEM :

The describes system architecture and its detailed working procedure. The front-end system provides a graphical user interface (GUI) in the form of website where clients interact with the system whereas the backend consists of web crawling and scrapping techniques in order to extract product information from different e-commerce websites. The extracted information of e- commerce products is then displayed on website. Client requests for desired product from main website and query is fired in local database. Product Information is displayed on main web page. Client can see prices of required product at one place present on different E-commerce firms. Another feature is provided on the website is price alert, which user can set, to get notified by the website whenever the suitable price comes up.

EXISTING SYSTEM DISADVANTAGES:

1.LESS ACCURACY

2. LOW EFFICIENCY

PROPOSED SYSTEM :

The proposed system is as follows: The backend system consists of two important techniques web crawling and web scrapping. Web scrapping is a technique that is used to extract information in the human readable format and display it on destination terminal. But before scrapping the output, Web Crawlers are responsible to navigate to the destination once the crawler reaches the correct page and matches up with the products, scrapping process starts. Web scrapping essentially consists of two tasks: first is to load the desired web page and second is to parse HTML information of the page to locate intended information. In this system Scrapping is done using python as it provides rich set of libraries to address these tasks. “requests” is used to load the URLs and “Beautiful soup” library is used to parse the web page. After scrapping the products information from different e-commerce websites, the data is displayed on the website.

PROPOSED SYSTEM ADVANTAGES:

1.HIGH ACCURACY

2.HIGH EFFICIENCY

SYSTEM DESIGN

SYSTEM ARCHITECTURE

IV. SYSTEM IMPLEMENTATION

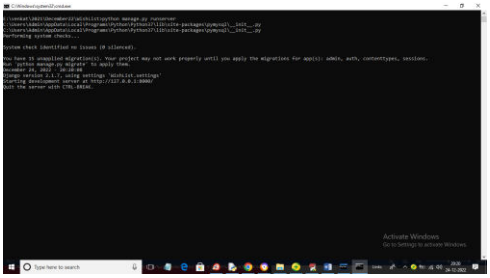
MODULES

1) **User signup:** using this module we will allow user to signup with the application
2) **User Login**: using this module we will allow user to login to application
3) **Search Products & Compare Prices:** using this module user can enter any product name and then

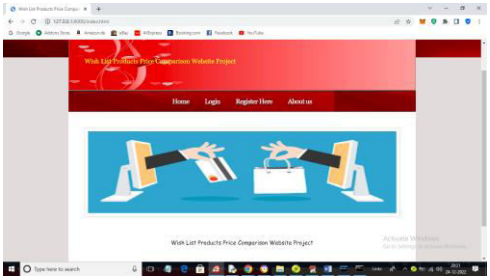
application will scrape details from Amazon and Flipkart and then display list of products to user. User can view entire list and then visit website with least prices

V. SCREEN SHOTS

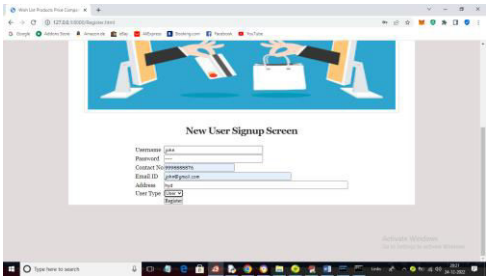
To run project double click on 'run.bat' file to start DJANGO server and get below screen



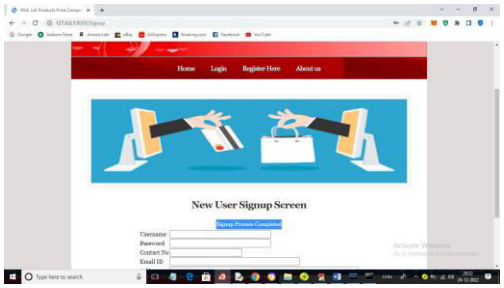
In above screen server is started and now open browser and enter URL as 'http://127.0.0.1:8000/index.html' and press enter key to get below page



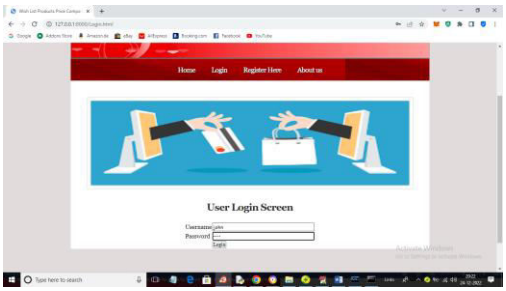
In above screen click on 'Register Here' link to get below signup screen



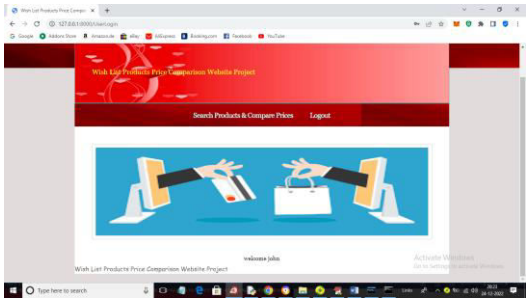
In above screen user is signing up and then press button to get below output



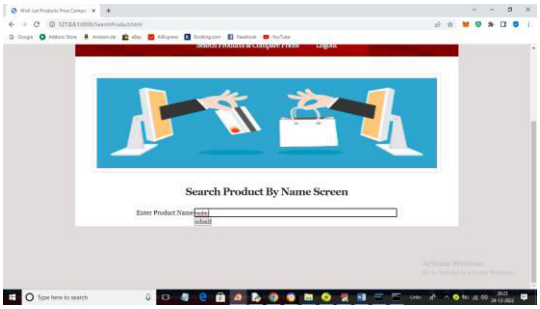
In above screen signup process completed and now click on 'Login' link to get below page



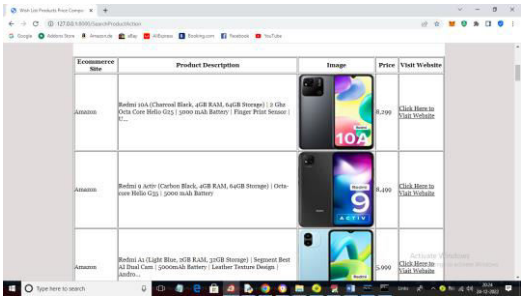
In above screen user is login and after login will get below page



In above screen user can click on 'Search Products & Compare Prices' link to get below screen

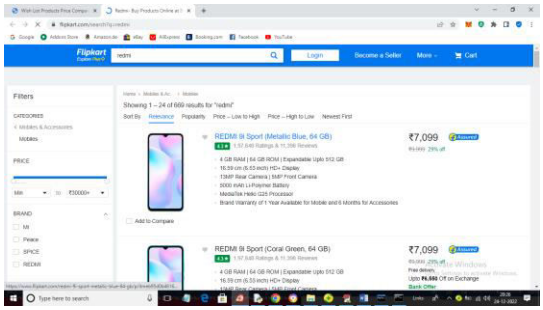


In above screen I entered product name as 'redmi' and then press button to get below search list from Amazon and Flipkart

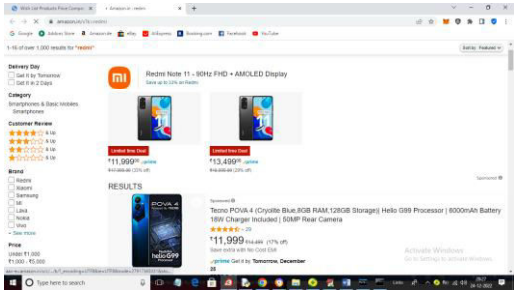


In above screen we got product details from Amazon with prices and you can click on 'Click Here to Visit Website' link to go to Amazon page and scroll down above page to view Flipkart details.

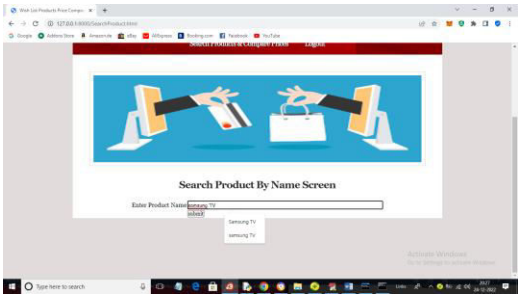
In above screen we can see details from Flipkart and now click on 'Click Here' link to visit page and get below output



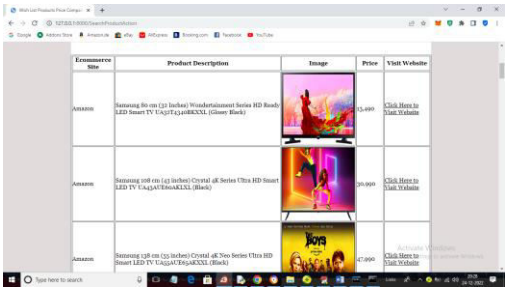
In above screen we can view Flipkart page and similarly we can see Amazon page also like below screen



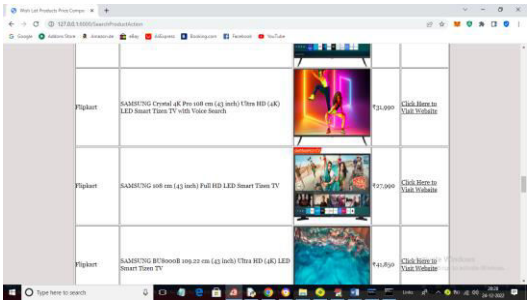
In above screen we get to Amazon page and now try other search



In above screen I entered product name as 'Samsung TV' and press button to get below page



In above screen we can see details from Amazon and in below screen we can see details from Flipkart



Similarly you can run for any products

Note: you ask to send notification but how this possible as we don't know when Amazon or any other side will update prices so every time application has to search Amazon and Flipkart for updates which will consume lots of resources and searching prices for all products will take lakhs of iterations and server may get crash. So while writing modules see its possibility as automatic it cannot be possible.

Actually we are scrapping Amazon and Flipkart by using HTML attributes which is currently used by both websites and they continuously update website and if they update attributes also then application will not perform search

VI. CONCLUSION AND FUTURE ENHANCEMENT

Users can find helpful information on the website to aid in making well-informed decisions. Working people no longer have to worry about checking prices before making purchases thanks to this price comparison website. This website will make it easier for customers to compare costs across several e-commerce buying sites in order to choose which product offers the best value. Customers will undoubtedly save time and effort by doing this. In the end, this will assist customers purchase online by combining tactics, the greatest offers, and discounts from all of the top online retailers.

REFERENCES

[1] The use of web scraping in computer parts and assembly price comparison LR Julian, F Natalia - 2015 3rd International Conference .

[2] An overview on web scraping techniques and tools AV Saurkar, KG Pathare, SA Gode - International Journal on Future …, 2018.

[3] Web scraping for unstructured data over web GN Chandrika, S Ramasubbareddy, K Govinda… - Embedded Systems and …, 2020 – Springer

[4] Shridevi Swami , Pujashree Vidap ," Web Scraping Framework based on Combining Tag and Value Similarity" Proceedings of the IJCSI International Journal of Computer Science Issues, Vol. 10, Issue 6, No 2, November 2013.

[5] Dr. Rajendra Nath ,Khyati Chopra," Web Crawlers: Taxonomy, Issues & Challenges" Proceedings of the International Journal of Advanced Research in Computer Science and Software Engineering , Volume 3, Issue 4, April 2013, pp. 944-948.

[6] Jos´e Ignacio Fern´andez-Villamor, Jacobo Blasco-Garc´ıa, Carlos ´A. Iglesias, Mercedes Garijo "A Semantic Scrapping Model for Web Resources" Spain.

[7] Richard K. Lomotey, Ralph Deters," RSenter: Tool for Topics and Terms Extraction from Unstructured Data Debris", Proceeding of the IEEE International Congress on Big Data, 2013.

[8] Web and android application for comparison of e-commerce products A Ambre, P Gaikwad, K Pawar, V Patil - no, 2019 - academia.edu

[9] Rahul Dhawani, Mrudav Shukla, Priyanka Puvar, Bhagirath Prajapati," A Novel Approach to Web Scraping Technology" Proceeding of the International Journal of Advanced Research in Computer Science and Software Engineering ,Volume 5, Issue 5, MAY 2015.

[10] E-Commerce Web-Crawling to Facilitate Consumers for Economical Choices S Saeed, M Naqvi, M Memon - International Journal of …, 2020 - journal.scientiaca.org.