WISH LIST PRODUCT PRICE COMPARISON WEBSITE

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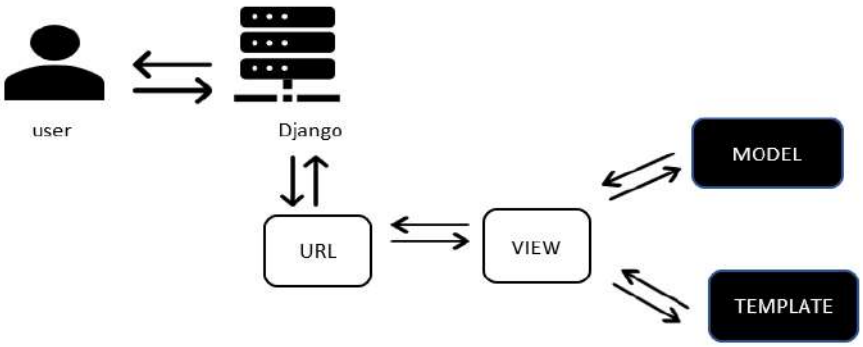
ABSTARCT:
IN THIS PAPER we proposed price comparison sites are designed to compare the price of goods and services from a range of providers, which will help consumers in making decision to choose products that will save their money through online. Considering the customers' busy lifestyle especially those who are living in the city area, most of the consumers prefer to buy their needs through the internet because it saves their time. Besides, consumers always go for the cheaper price in purchasing products therefore by using price comparison website, customers do not have to travel from shop to shop only to survey the price offered by different shops for the same product. They can just check it from the price comparison website itself and decide where they should buy the products they need. This project, named as Price4You is the place where shoppers could find the great deals on the products. The best deals will be clearly highlighted. To obtain best deals from Price comparison websites web crawlers and web scrapping techniques are used to fetch detailed information. This way, paper aims to provide solution for online customers to buy products at good deal and save their valuable time, effort, and money.

INTRODUCTION

In the current era of online business, ecommerce has become a huge market for the people to buy goods online. Increasing use of smart devices and other mediums has paved the way for users to buy products almost from anywhere. This has increased involvement of online buyers evolving e-commerce business. These large numbers of ecommerce websites put users in turmoil to search and choose to buy a single product from multiple ecommerce websites. The proposed solution helps online users to grab best deal for their product from multiple ecommerce websites on single web interface. This will in turn save users time, money, and efforts to find the same product prices on different ecommerce websites. Proposed system uses web scraping technique to extract data from ecommerce web pages and web crawler to links for products. Additionally, this page contains the feature of price alert, which user can set, to get notified by the website whenever the suitable price comes up. This system uses the following technologies:

1) Web Crawler: The system deals with price comparison engine. The first thing required are to gather large amount of data from different ecommerce websites. It is not possible to manually collect the data from websites. Hence the best way is to create a web crawler that will navigate to these e-commerce websites. The fetched URLs are sent to scrapper for scrapping process.
2) Web Scrapper: Web Scrapping is used to extract HTML data from URL's and use it for personal purpose. As this is price comparison website, data is scrapped from multiple e-commerce websites. In this system, Scrapping is done using python libraries like requests and beautifulsoup4. Beautifulsoup4 is a python library which is used for parsing html pages. Using these, product information from different e-commerce sites is scrapped and stored in database.
3) Python: Python is a broadly useful deciphered, intelligent, object-situated, and significant level programming language. It gives special importance to code legibility and makes the computer specialist tasks easy by writing code in a small number of lines.
4) Django Web Framework: Django is an elevated level Python Web structure that empowers fast improvement and spotless plan. Worked by experienced designers, it deals with a significant part of the problem of Web advancement, so you can concentrate on composing your application without expecting to waste time. It is free and open source. Django's essential objective is to facilitate the making of complex, database-driven websites. Django underlines reusability and "pluggability" of parts, fast improvement, and the standard of do not rehash yourself. Python is utilized all through, in any event, for settings documents and information models.



LITERATURE SURVEY

[1] The research entitled 'Comparison sites' was written by Moraga-Gonzalez J.L and Wildenbeest M.R and it was published in July, 2011. The research was focus on the price comparison sites and its connotation towards market efficiency and price competition. The price comparison sites attract all the involved parties no matter suppliers or the consumers to its platform as it has become the aggregator of product information.

[2] The research entitled 'The Use of Price Comparison Sites in the UK General Insurance Market' which written by Emily Knight, a strategist for Consumer Intelligence has reported the current performance, media coverage, usage and marketing activity of price comparison sites in the UK General Insurance sector. The results shows that there is increased on the advertising spend and competition and it gives adverse effect on the financial performance towards the price comparison sites. Meanwhile the number of consumers using price comparison sites for quotes has remains high and its average number of sites used are increasing over time. Based on the research, 8 out of 10 people are likely to get quotes from the price comparison sites in the future which show good sign of price comparison sites to stay in business in future.

[3] The article 'Consumers plan more web research before buying' was written by Reuther T. – Senior Editor of internetretailer.com, a portal related to e commerce. It is based on the findings of a survey made by Deloitte LLP, concludes that a fifth of online consumers plan to conduct more web research this year (2012) as compared to year 2011 before buying. Delaoitte LLP, a consulting, auditing and financial services firm, has conducted the online survey on 5-12 July 2012 towards 1, 314 parents of children in kindergarten through the 12th grade. Around 20% of the survey respondents plan to shop online this year but the web is playing the important role in giving influence for the purchases either it is done online or offline (going to the shop to purchase). The result shows that a third of the parents who responded plan to visit e-commerce sites, retail blogs and other web locations to learn before buying the items.

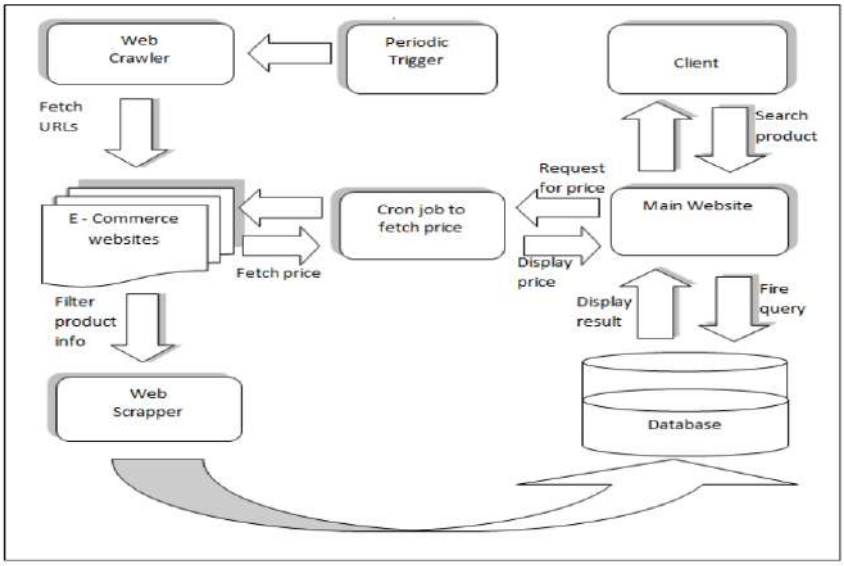
PROPOSED SYSYTEM

In this paper the proposed system compares and displays the prices of a product from different e-commerce websites. Top search results are displayed to the user on a single interface. Visualization of product prices helps the user in determining the best price for a product. The system redirects the user to the original website of a particular product, in case the user chooses to buy any product. The average time taken by a user to manually search and compare price of a product on different websites is quite high. Also, the user gets notified about the price drop of an interested product by the notification system via email. Hence, our application saves time and inconvenience caused to user while searching and comparing prices of products online.

SYSTEM ARCHITECTURE

This architecture describes 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

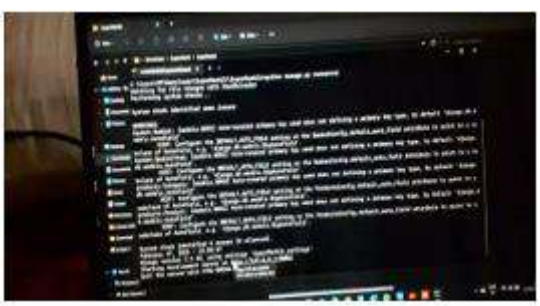
extracted information of e-commerce products is stored in MongoDB database. Client requests for desired product from main website and query is fired in local database. Product Information is displayed on main web page. Client can see prices of required product at one place present on different E-commerce firms. Another feature is provided on the website that compares products. User can add products of same the category to compare. User may also analyse the product for its details and specifications.

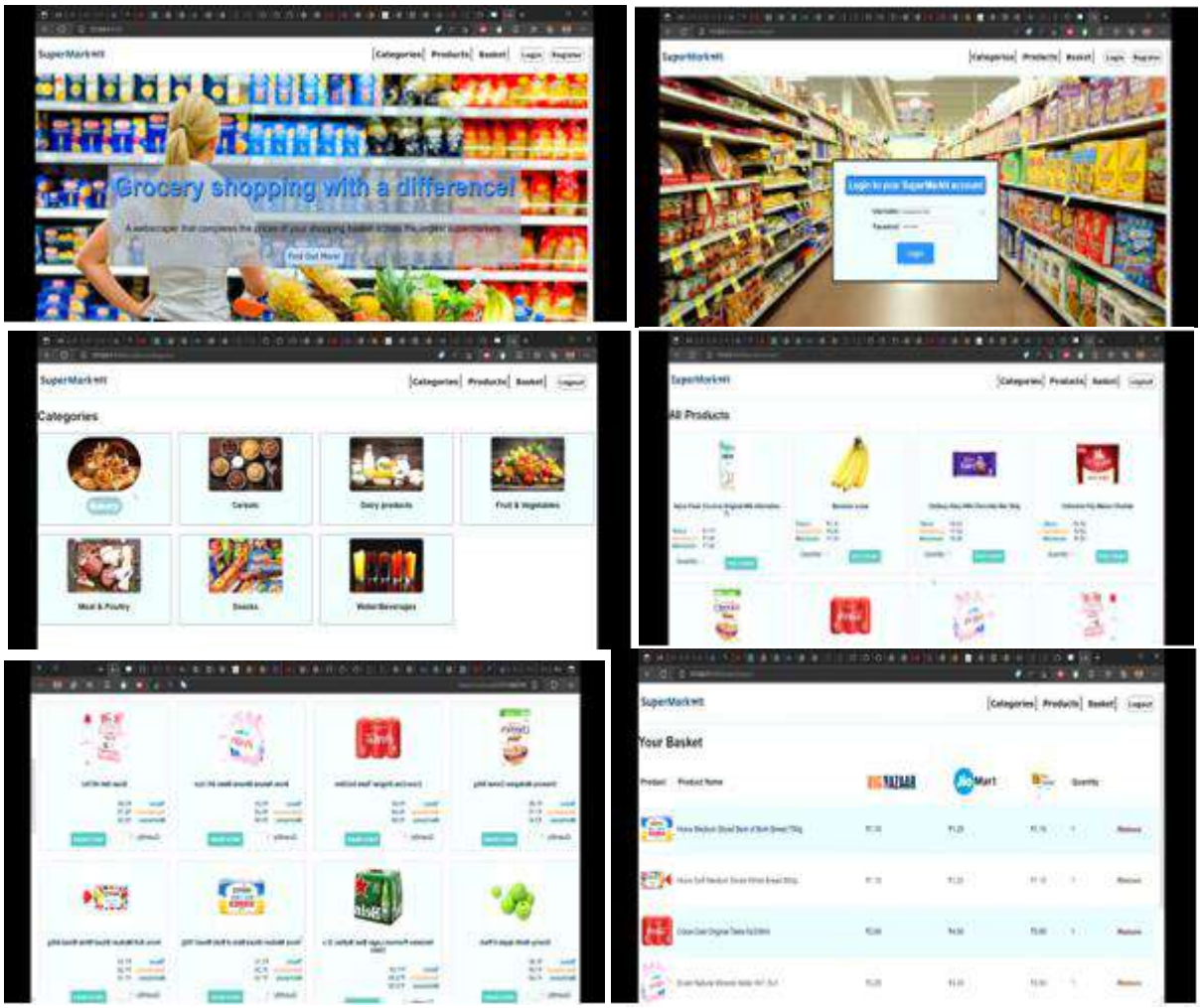


IMPLEMENTATION

Working of 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. The frond end consists of Main website. The client searches for the required product in search bar and query is fired in local database i.e., sqlite3. The website is designed using Django web framework which is written in python. Required results are retrieved and displayed on Main website. The client can then compare prices of products that are available on e-commerce websites. A soon as client selects on best deal according to him, he will be redirected to the original ecommerce website. Another feature provided is price alert, which user can set, to get notified by the website whenever the suitable price comes up.

SAMPLE SCREENS





CONCLUSION

The Online Shopping Platform enables the user to find the best price available of a product on the internet with ease. As there are many available e-commerce websites with thousands of products, our system uses powerful web scrapping technologies and analytics to determine the best price of a product. The consistent application interface helps user to avoid unnecessary hassle to navigate through different websites while looking for best available price. Due to unification of search results from various platforms at a single destination, it becomes incredibly easy to use this platform. The Online Shopping Platform not only determines the best product price but it also allows for an improved personal shopping experience by suggesting different products to users. The website provides users with useful information that will help them making informed decision. With this price comparison website, it solves the problems of the working people to check on the price before buying products. This website will facilitate users to analyse prices that are present on different e-commerce shopping websites so that they get to know the cheapest price of product with best deal. This will surely save buyers efforts and valuable time. Ultimately, this will bring together strategies, best offers and deals from all leading online stores and will help buyers to shop online. It provides platform for sellers to promote new products and advertise any promotion or sales going on.

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