PCFOS - PRODUCT COMPARISON FOR ONLINE SHOPPING

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ABSTRACT

In the current era of online business, e commerce 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 e commerce websites put users in turmoil to search and choose to buy a single product from multiple e commerce websites. The proposed solution helps online users to grab best deal for their product from multiple e commerce websites on single web interface. This will in turn save users time, money, and efforts to find the same product prices on different e commerce websites. Proposed system uses web scraping technique to extract data from e commerce 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

Keywords: Comparison, Web crawler, Products, E-commerce, Compare product price.

1. INTRODUCTION

In the current era of online business, e commerce 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 e commerce websites put users in turmoil to search and choose to buy a single product from multiple e commerce websites. The proposed solution helps online users to grab best deal for their product from multiple e commerce websites on single web interface. This will in turn save users time, money, and efforts to find the same product prices on different e commerce websites. Proposed system uses web scraping technique to extract data from e commerce 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 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.

2. METHODOLOGY

- **Login:** module In this module user will able to login into system and search the product.

- **Admin Panel:** From this module user having some admin access in module user will able to add new products details and respective URLs of e commerce sites.

- **Product Price comparison:** In this module user will able to perform the comparison of product from different sites such as Amazon, Flipkart, Snapdeal, etc.

- Sellers/Retailers Any parties that would like to join and become partner Their roles are to submit the price lists to the admin of . They are also responsible to inform the admin if they want to advertise the new products and also if there are sales and promotion being held at the shop.

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 e commerce website. Another feature provided is price alert, which user can set, to get notified by the website whenever the suitable price comes up.

3. MODELING AND ANALYSIS

DFD Diagrams-
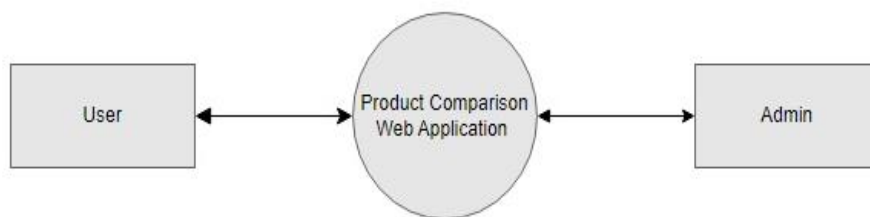

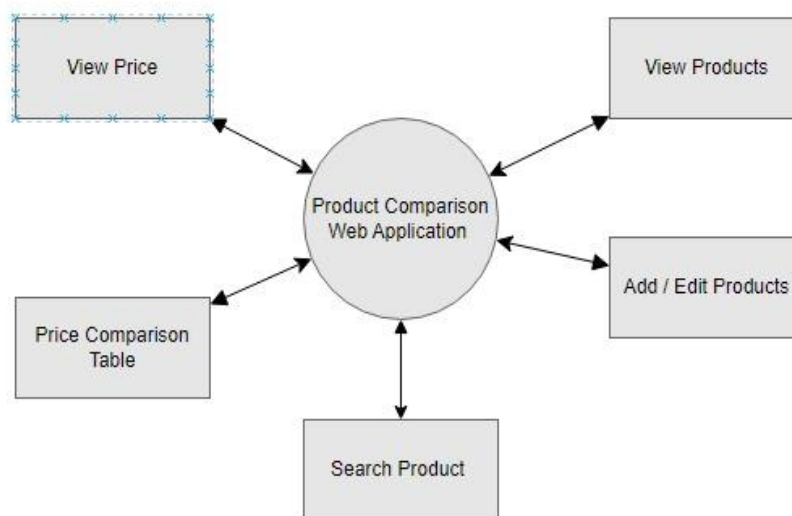
Figure 1: Level 0 Data Flow Diagram (DFD)

Figure 2: Level 1 Data Flow Diagram (DFD)

The success criteria User Satisfaction: Gather user feedback and ratings to gauge overall satisfaction with the web application , aiming for consistently high ratings.Competition and Market Share: Monitor the platform's market share and competitive position within the online medical booking industry. Success in an Online Medical Booking Store would involve achieving or exceeding these success criteria while continually improving the platform's functionality, user experience, and its ability to provide valuable healthcare services to both patients and healthcare providers.

4. RESULTS AND DISCUSSION

User-friendly platform Help to needy people Accurate Price Comparisons: Provide users with up-to-date and accurate pricing information for a wide range of products from different retailers.
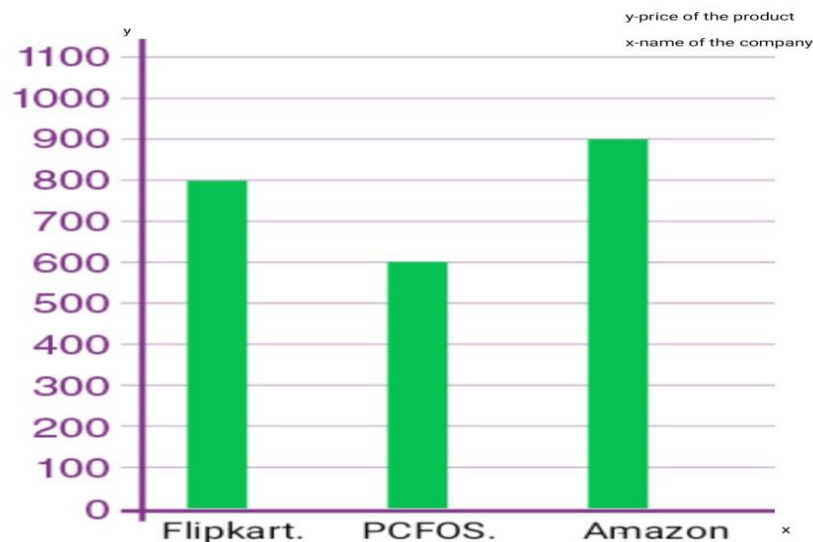
Mobile Accessibility: Develop a responsive and mobile-friendly platform to accommodate users on various devices, including smartphones and tablets.

Data Security and Privacy: Prioritize the security and privacy of user data, ensuring that sensitive information is handled with care and following relevant data protection regulations.

A table will be displayed on our website which contains a accurate price comparisons from different website and application and different retailers.

The output of the website will be shown in such manner

Product name	Price at Flipkart	Price at Amazon	Price at PCFOS
pendrive	700	750	650

5. CONCLUSION

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 analyze 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.

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