# Online Price Comparison

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**Abstract**

**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.**

**Keywords: Web Scrapper, E-Commerce, Web Crawler, Python, Beautiful Soup, Price Comparison**

## 1. INTRODUCTION

A price comparison website acts as a platform or medium between consumers and sellers. It allows the consumers to view different price lists for the product chosen by the user and helps the consumers to make an informed decision on which one to choose to save money. It also serves as a tool to help consumers increase their price awareness, so they don't feel misled by advertisements from retailers who claim they offer the lowest price, but the reality is different. Unlike other comparison sites, E- commerce price comparison website (the name of this project) will focus on providing a price list of products which we want to search online and purchase at a cheaper price.

**i) 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 thissystem, 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.

**ii) 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.

## 2. LITERATURE SURVEY

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. 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.[1]

Price comparison websites are meant to compare the prices of goods and services from a variety of sources, assisting consumers in making decisions to purchase things that will save them money online. Given their hectic lifestyles, especially those who live in cities, most customers prefer to acquire their necessities online because it saves them time.[2]
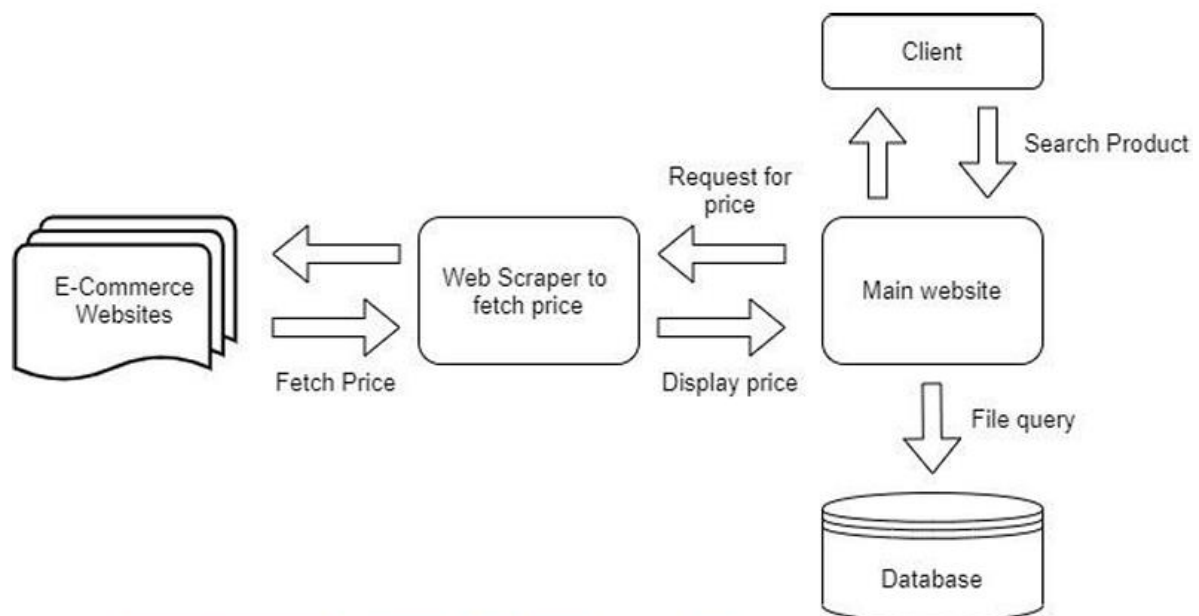
## 3. METHODOLOGY



**Fig. 3.1**

**System Architecture**

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.
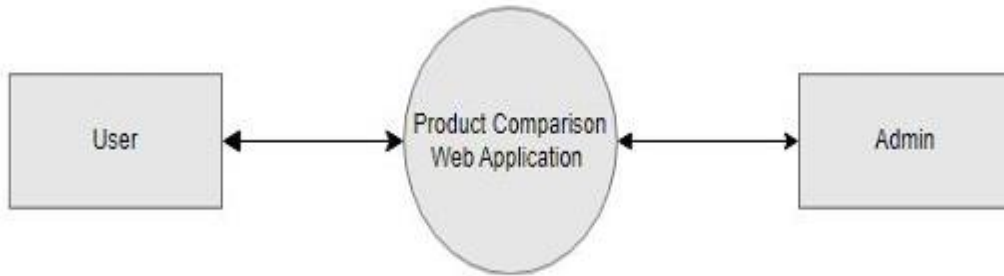
### 3.2 Data Flow Diagrams
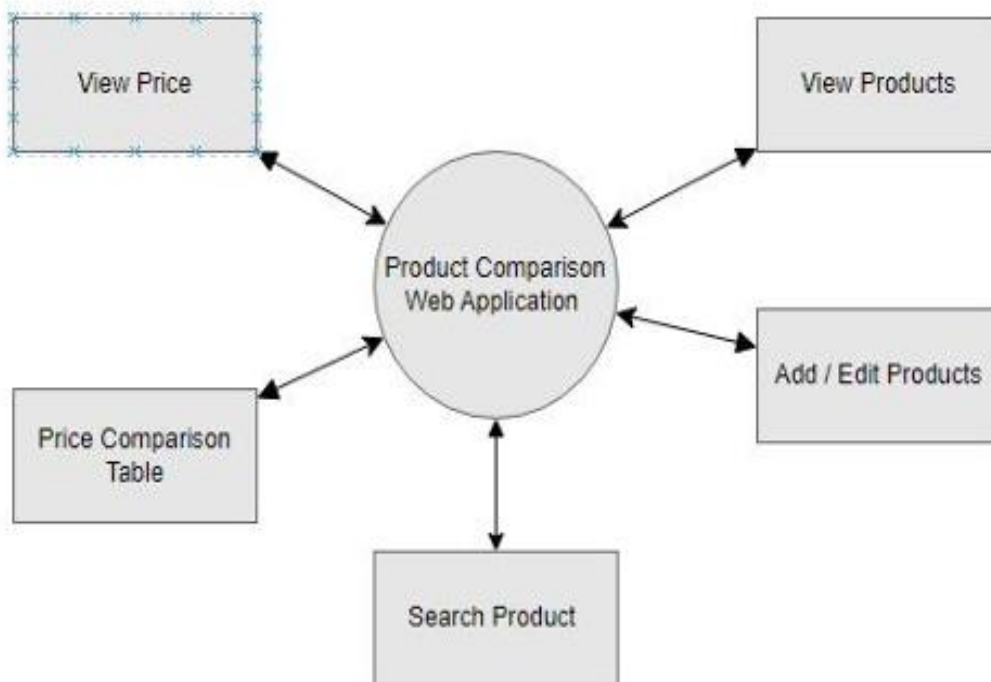


**Fig 3.2: Level 0 Data Flow Diagram**



**Fig 3.3: Level 1 Data Flow Diagram**

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. EXPECTED RESULT



**Fig 4.1: Home Page**



**Fig 4.2: Search Bar**

Online price comparison is a service that gives users the opportunity to compare prices of the same product at different online stores. This helps users get the cheapest price and the best deal.

## 5. CONCLUSION

Online price comparison websites are valuable tools for consumers looking to find the best deals across various retailers. They offer convenience, time savings, and transparency, allowing users to compare prices, features, and reviews for products quickly. By using these platforms, shoppers can make more informed purchasing decisions and potentially save money. However, it's important to keep in mind that not all comparison sites include every retailer, and prices can fluctuate frequently, so users should verify deals before making a final purchase.

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