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Product Comparison and Classification Framework using Python Django

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Abstract: ***In recent years, mobile applications have become increasingly practical for everyday use. This project focuses on providing users with a convenient way to compare the availability and pricing of products across multiple e-commerce websites. By simply entering product information into the application, users can quickly compare pricing from various sources. The application's databases are then searched to display a side-by-side comparison of the product information found on different websites. Additionally, users can receive push notifications when products become available or go on sale, ensuring that they never miss out on a great deal.***
Keywords: Comparison, Quality, Brand, Price, Performance, Features

I. INTRODUCTION

The development of e-commerce has driven to an increment within the notoriety of cost comparison websites, which give buyers with data and values to compare prices across multiple online shopping sites. These websites save shoppers time and money by helping then make informed purchase decisions. Price comparison is typically done by manually checking the prices of the same product across different online outlets, which can be inconvenient and time-consuming. Though there are several websites that compare pricing, none do so for items on wish lists. To combat this, we put out a project called the Wish List Products Price Comparison Website, which only analyzes the costs of items the user plans to purchase. consumers can compare prices on this website with those on other e-commerce sites, and the site notifies consumers when a product's price changes. For those who purchase online frequently and want to compare costs from several online retailers in one spot, it is extremely useful. This technique aids consumers in finding the most inexpensive pricing for the things they want by displaying product prices from many sellers.

II. LITERATURE SURVEY

"Price comparison sites have become increasingly important in today's market, facilitating efficiency and competition among suppliers and benefiting consumers. In the past, consumers had limited options to research products and services, relying on traditional media like books, magazines, and newspapers. The procedure has become easier for consumers to conduct product and service research online, though, thanks to the development of the internet. Sites that compare prices are a sort of search technology that aids consumers in finding goods and services, evaluating competing options, and cutting down on search expenses. Today's price comparison sites offer advanced features such as calculating product costs, crawling websites, and providing users with greater control. By collecting and conglomerating costs, things, and other critical information from third parties, price comparison sites present a wealth of information to consumers in a user-friendly way."

III. LIMITATIONS

1) Accurate data entry is essential to obtain precise results from the application.
2) To operate properly, this application needs to be connected to the internet.
3) Users must enter the correct data, or the application may behave abnormally.

IV. PROPOSED SYSTEM

The current system has identified anomalies and hence a computerized system is being proposed. The proposed system will be accessible to only one entity, namely the user. The system is called a wishlist product price comparison site that compares the prices of products that users are trying to purchase. The system has sophisticated features that allow price comparison across numerous e-commerce websites and alerts users when the price of a specific item on their wish list changes. This website will be particularly useful for frequent online shoppers as it will allow them to compare prices from various online retailers in one location.

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The software will display product prices from various retailers, enabling the user to identify the most affordable price for the product they want to buy. Whenever there is a change in the product price, the system will send a notification to the user.

A. Advantages

1) Shopping at affordable prices has become more accessible.
2) Time is saved using this system.
3) Multiple individuals can benefit from accessing counseling sessions online.

V. OBJECTIVES AND LIMITATIONS OF THE CURRENT WORK

With the increasing popularity of e-commerce, consumers now have access to numerous online shopping sites with different prices. To make informed purchase decisions, comparing prices across different outlets is crucial. Online shopping sites offer a convenient and accessible way for shoppers to buy a variety of products.

This system includes an advanced feature that sends notifications for any price changes of specific products added to the user's wish list. Regular online shoppers will find this price comparison website especially helpful because it allows them to compare prices from various retailers in one location.

To assist users in locating the most cost-effective price for the goods they want to start buying, the system compiles product prices from various retailers.

VI. PROBLEMS AND DRAWBACKS OF CURRENT SCENARIO

A. Problems

1) This website will allow users to add products they are interested in purchasing to their wish list. The website will then compare the prices of these products from various e-commerce websites and display them in one place for easy comparison.
2) In addition, the website has an advanced feature that sends notifications to the user whenever the cost of a specific item on their wish list changes. This makes it easier for users to keep up with price changes and benefit from them.
3) Regular online shoppers who want to compare prices from various online stores in one place will find this system to be very helpful.It will also save them time and energy that would otherwise be spent manually searching for the best prices. By showing the product prices from different retailers, this system helps users identify the most affordable price for their desired products.

B. Drawbacks

1) When people want to buy something, they usually check prices online first
2) Online shopping sites offer the same products with varying prices
3) Previously, people had to manually compare prices from different sites
4) The system compares prices from various e-commerce websites and sends notifications for price changes
5) For regular online shoppers who want to compare prices from various retailers in one place, this system is helpful.
6) The system displays information to clients in a user-friendly way
7) The current system has maintenance, accuracy, and ease of use issues
8) The proposed system aims to address these issues be prepared in advance and plan accordingly in this case.

VII. METHODOLOGY

The process of gathering data for research can be achieved through various techniques, such as oral interviews, which may be used for both theoretical and practical research purposes.

For instance, in management studies, data may be collected through oral interviews to conceptualize operational planning and change management strategies.

In the field of information systems, all projects must pass through various phases known as the System Development Life Cycle (SDLC) to be completed successfully. The SDLC comprises the Planning, Analysis, Design, and Implementation stages, which all contribute to the creation and delivery of the final system. To design the methodology for a project, software is used to analyze and draw relevant conclusions.

The SSADM is an example of a CDLC model that involves the systematic completion of each stage by analysts and users, with each stage being evaluated before proceeding to the next (Hevner, 2004).

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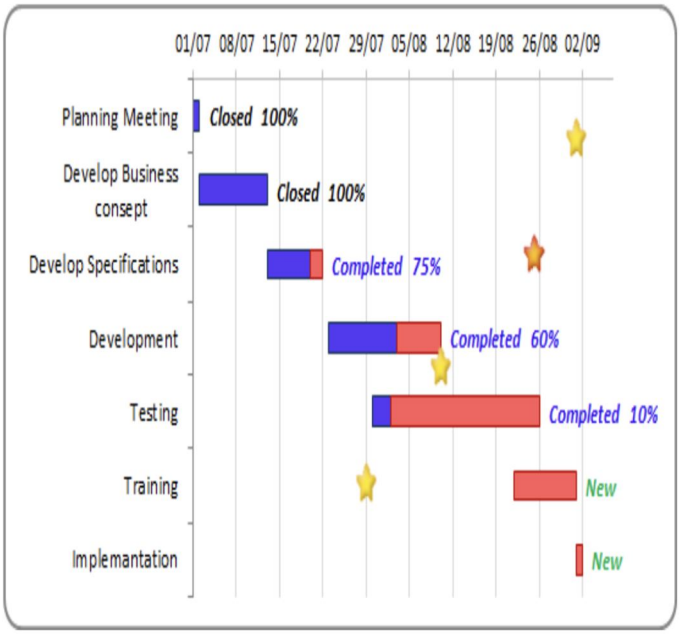


Fig-1: Gantt Chart.

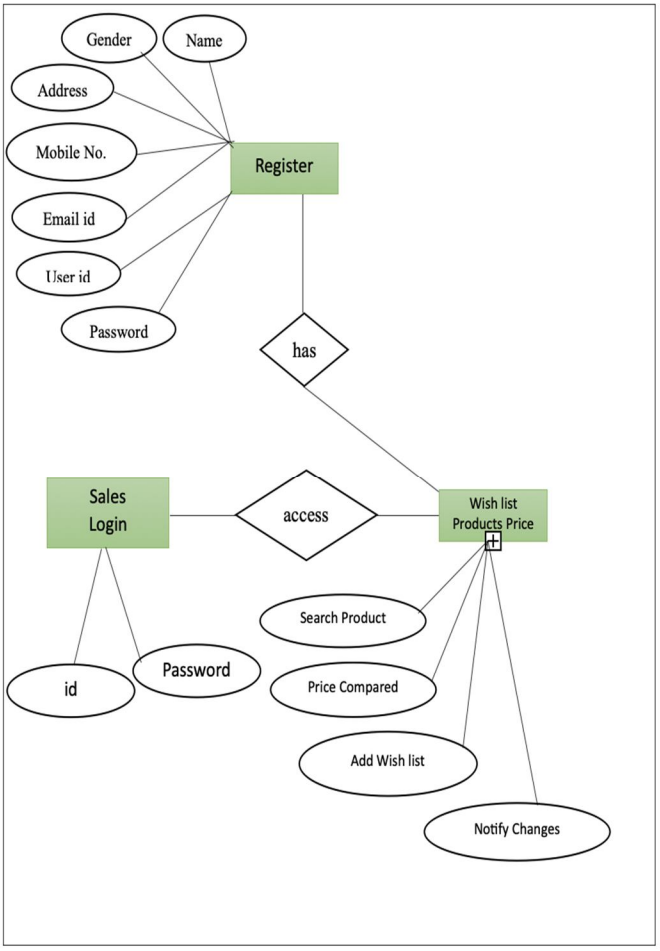


Fig-2: E-R Diagram

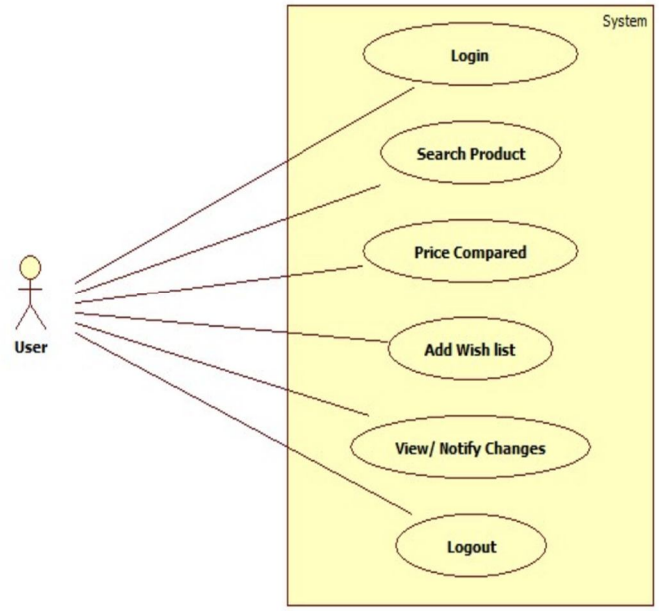


Fig-3: Use Case Diagram

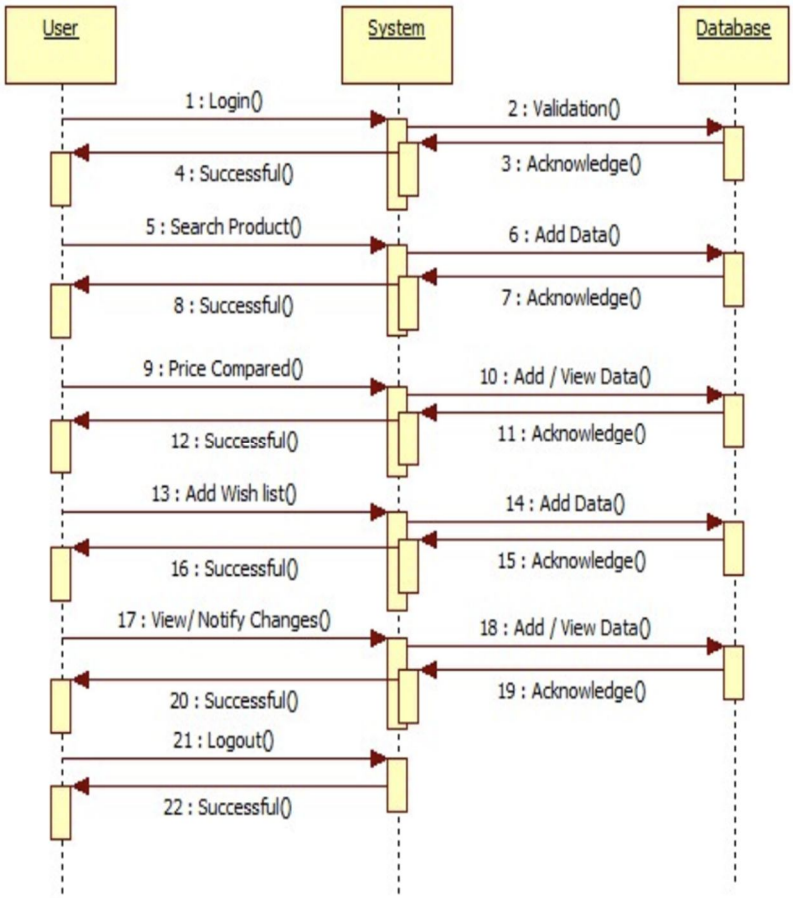


Fig-4: Sequence Diagram

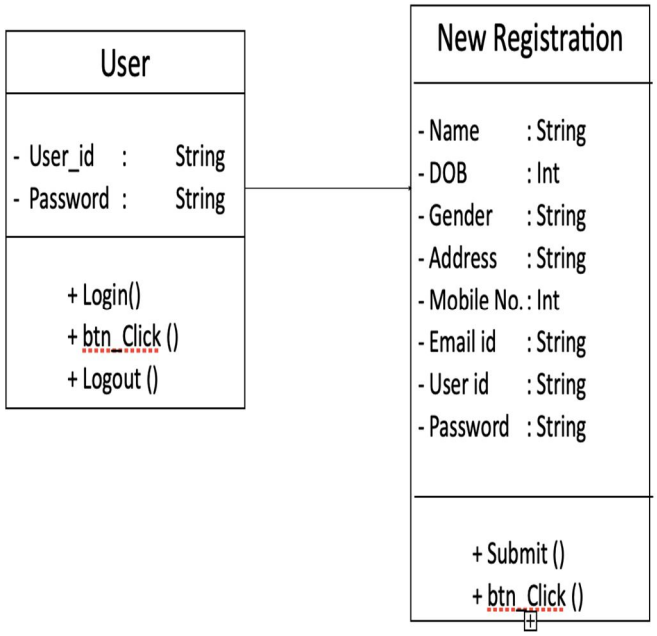


Fig-5: Class Diagram

Data Flow Diagrams

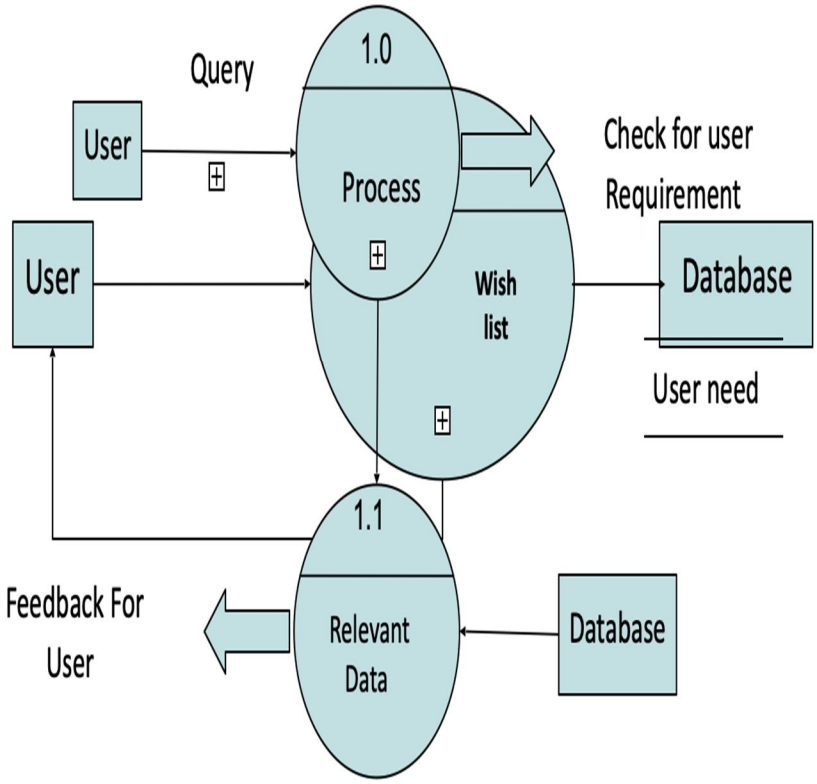


Fig-6.1:Data Flow Diagrams

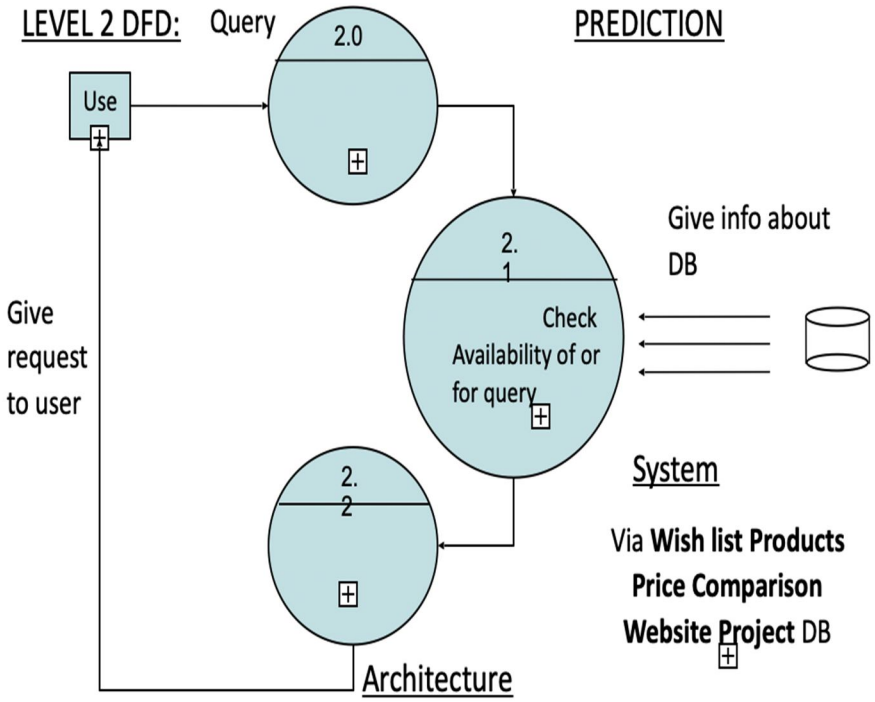


Fig-6.1: Data Flow Diagrams

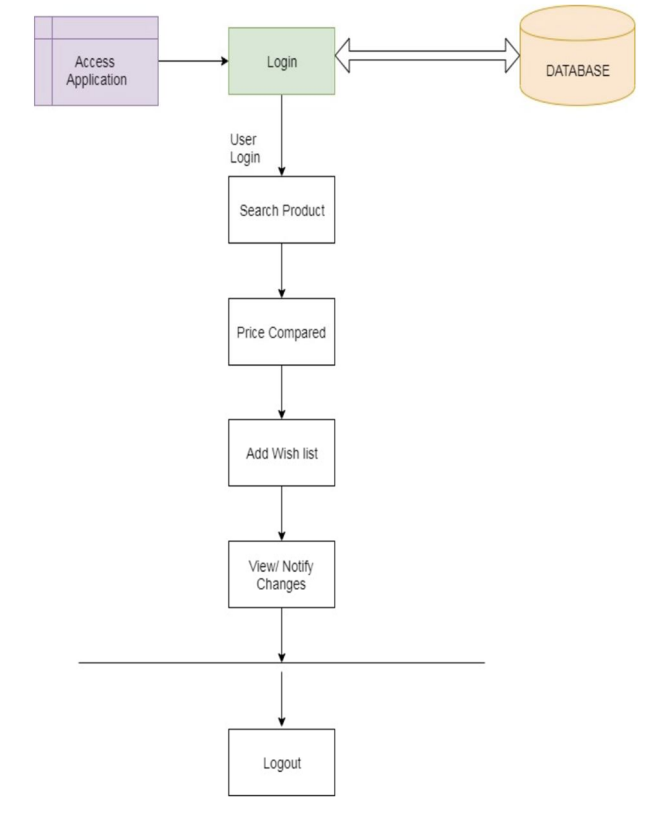


Fig 6.3: Data Flow Diagrams

VIII. FEATURES

A. Load Balancing
B. Easy Accessibility
C. User Friendly
D. Efficient and Reliable
E. Easy Maintenance

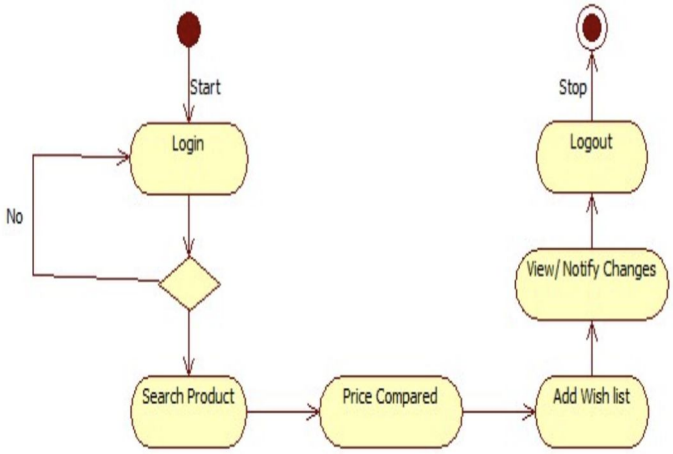


Fig-7: Activity Diagram

IX. CONCLUSION AND FUTURE SCOPE

Our team has recently completed the development of a system called "Products Price Comparison" using Django and Python as the programming language. Developing this system required a significant amount of effort from our team. We are proud of the outcome and believe that it will provide great satisfaction to the users. However, as with any development project, there is always room for improvement, and we are open to any future modifications or enhancements. This project has taught us a lot about the development field, and we believe that this knowledge will be beneficial to us in the future.

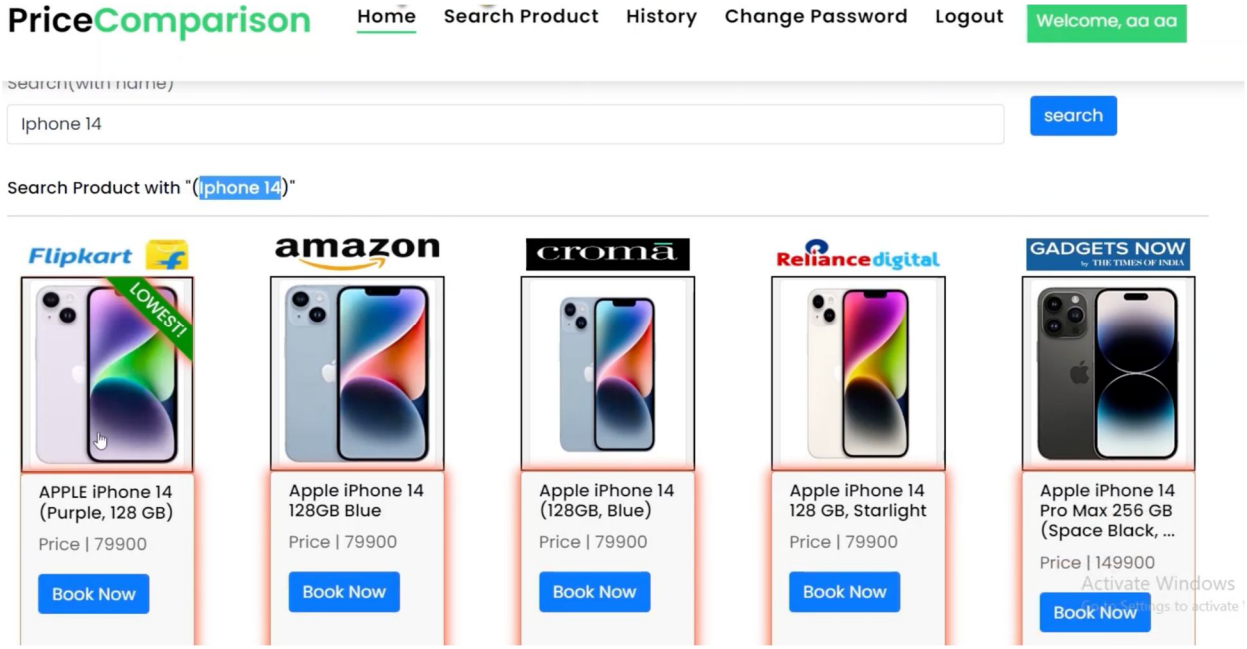
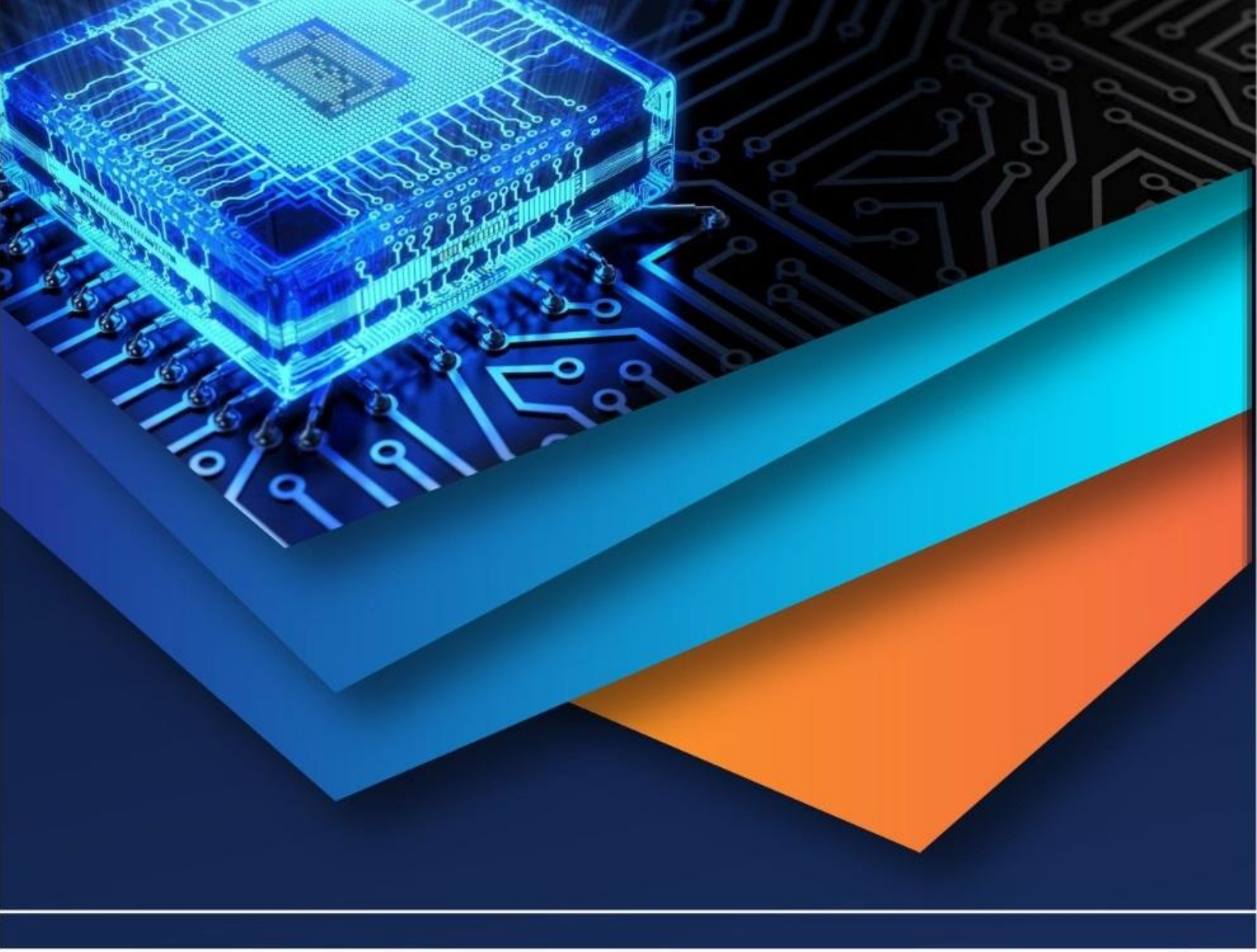


Fig-8: Application User Interface

REFERENCES

[1] Pang, B., Lee, L. and Vaidyanathan, "S.Thumbs up? sentiment classification using machine learning techniques," Proceedings of the ACL-02 conference on Empirical methods in natural language processing-Volume 10 (pp. 79-86). Association for Computational Linguistics, July 2002
[2] Hu, M. and Liu, B," Mining opinion features in customer reviews," In AAAI Vol. 4, No. 4, pp. 755-760,July 2004
[3] Kamp"s, J., Marx, M.J, Mokken, R.J. and Rijke, M.,"Using word net to measure semantic orientations of adjectives,"LREC 2004 May 26 (Vol. 4, pp. 1115-1118). 2004
[4] Kim, S.M. and Hovy, E," Determining the sentiment of opinions," In Proceedings of the 20th international conference on Computational Linguistics (p. 1367). Association for Computational Linguistics, August 2004
[5] Itziar Marin, Eduardo Arceredillo, AitzolZuloaga, and Jagoba Arias, "Wireless Sensor Networks: A Survey on Ultra-Low Power-Aware Design," tech. rep., World Academy of Science, Engineering and Technology, August 2005.
[6] Webcredible Knight, E. (2017) : "The Use of Price Comparison Sites in the UK General Insurance Market.Moraga-Gonzalez, J.L. ,
[7] Wildenbeest, M.R. (2019) : Comparison Sites.On the Horizon (2009), May.Internetworldstat.com - "World"s Internet Usage Statistics" [retrieved on June 20, 2012] at http://www.internetworldstats.com/stats.hm
[8] Grant, K.B (2008) [retrieved on June 20, 2012] – "Which Price Comparison Shopping is The Best?" at http://www.smartmoney.com/spend/family money/which-comparison-shopping-site-is best/
[9] Ong K. (2011) : "Online Shopping Statistics in Malaysia" [retrieved on June 21,2012]at /humanwebsite.com.my/blog/online-shopping-statistics-in-malaysia.html
[10] Gantthead.com–"Rapid Application DevelopmentProcess"[retrieved on June 21,2012]at http://www.gantthead.com/content/processes/11306.cfm
[11] Malaysia Crunch website : "Malaysia's E-CommerceStatistic"[retrieved on June 25,2012]at http://www.malaysiacrunch.com/2009/09/ma laysias-e-commerce-statistics.html
[12] E-Commerce Web-Crawling to Facilitate Consumers for Economical Choices S Saeed, M Naqvi, M Memon - International Journal of ..., 2020 - journal.scientiaca.org
[13] The use of web scraping in computer parts and assembly price comparison LR Julian, F Natalia - 2015 3rd International Conference on ..., 2015 - ieeexplore.ieee.org
[14] An over view on web scraping techniques and tools AV Saurkar, KGPathare, SA Gode - International Journal on Future ..., 2018 - ijfrcsce.org
[15] Web scraping for unstructured data over web GN Chandrika, S Ramasubbareddy, K Govinda... - Embedded Systems and ..., 2020 - Springer
[16] 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.
[17] 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.
[18] Jos´e Ignacio Fern´andez-Villamor, Jacobo Blasco-Garc´ıa, Carlos´A. Iglesias, Mercedes Garijo "A Semantic Scrapping Model for Web Resources" Spain.
[19] 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.
[20] Web and android application for comparison of e-commerce products A Ambre, P Gaikwad, K Pawar, V Patil - no, 2019 - academia.edu
[21] 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.



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