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Providing User-End Compactible Laptops and Pcs

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Abstract: ***We are moving towards the modernization of our civilization, technology plays a leading role. And one of the primary technical devices owned by people of this century is a personal computer or a laptop. It takes a lot of time to decide which laptop/PC is suitable for the user. This project focuses on providing a faster decision-making experience for their laptop/PC and takes up different benchmark tests of CPU and GPU. This project will be provided to the end-user as a website/software for a user-friendly experience. This project will show two or three laptops/PCs recommended by the software according to their needs. The project will have data set of details related to laptops/PCs.***
Keywords: User-friendly, time-saving, precise results, product details precise but not accurate.

I. INTRODUCTION

As are growing towards civilization, The need for electronic gadgets is increasing day by day. The need for a pc/laptop is also in demand, but getting a good pc/laptop is difficult as a specification for a pc/laptop plays a vital role for an organization, a student etc. Our project providing user end compactible laptops helps a person to get a well-desired laptop/pc for any kind of use personal/organization. Our website focuses on getting the best possible outcome for buying this and not that our website also provide links to buy those gadgets at the lowest price possible.
People have to just answer some of the questions through a chat bot so that we can help them the more precise way to get their dream laptop/pc at an affordable price, but the price may differ as it depends on their choice of selection.

A. Scope Of The Project

Our main motive of the project is to provide the precise laptop/pc for student/organization etc. as it is a big problem for everyone to get a good laptop/pc with good specifications at an affordable price and through our website by using chat bot people can get their desired laptop/pc. On our website, we also provide the latest news regarding upcoming laptop/pc components.

B. Related Works

Chatbot is the main feature of our website as it helps any user to get the desired output as per their choice and it also guide them to go on further in the use of website. This chatbot will ask a sort of question to get a more precise output for the user as time matters a lot it will show the output in very less time, and with that, it will also provide links to buy.

II. LITERATURE REVIEW

1) "DOEL laptops" "Crook, S. J., Sharma, M. D., & Wilson, R. (2015)"

Laptop computers were first introduced in Australian schools in the late 1980s, but integrating laptop computers into instruction is a recent innovation in Canadian schools and around the world. The use of laptops may improve instruction by decreasing teacher-centred instruction and increasing student-centred learning. Bhuiyan, (2009) This study revealed that desktop computers are replaced by Laptop Computers with their unique feature of portability and a basic necessity for all individuals- from businessmen to students, teachers and even for the kid's wing to their lower than conventional size and price. The DOEL identify the key features and performance of customers of DOEL complain about standby duration/battery, RAM, processor, Bluetooth, WiFi, audio, I/O connectivity, charger and screen resolution of DOEL laptops. The customers are satisfied with the touch-point service offered by DOEL. This study concluded the improvements in the complaint features for success in a competitive yet prospective market.

2) "Highly differentiated laptops in the consumer industry" "Kanwar. R (2012)"

His research article stated that are highly differentiated laptops in the consumer industry. No longer does one vendor dominate the market, enjoying its product being seen as exceedingly superior to its competition. The commoditization of the market has diminished a vendor's ability to strongly differentiate themselves among consumers.

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3) "Switching laptops over PCs" "Ekener-Petersen, E., & Finnveden, G. (2013)"

About 180 million desktop computers (16 % of the existing installed base) were expected to be replaced and 35 million to be dumped into landfill in 2008. Since 2008, more than half of all computers sold have been portable types, i.e., laptops. (IDC Report 2015) pointed out that South India is the highest consumer in the Indian PC market. "South India has a few giants in the enterprise market, like top spenders in IT products.

The consumers 'preferences are moving towards portable personal computers(pcs)and semi-urban Indians prefer more to compact devices like laptops, notebooks, tablets and other mobile devices. Indian PC shipment (2015) Reports that huge order from the Tamil Nadu state government and because of that Lenovo moves to the top leader in the Personal Computers (PCs)market. Consequently, the number two position was HP because of huge orders from the UP-state government, followed by a third market share Dell and fourth place was Acer's market share in the fourth quarter of 2015.The below table indicates the percentage of market share in the Tamil Nadu Personal Computer (PCs) market.

4) "Laptop usage from a student's point of view" "Sharma, Pinki (2012)"

This study presented a brief overview of the Indian Laptop industry. The paper highlighted laptop usage from a student's point of view. The research paper further attempts to identify and evaluate various factors which influence the purchase intent of management and engineering students. Finally, this paper came out with some simple and practical suggestions to improve laptop features that will help laptop manufacturers to develop brand management strategies and to make proper positioning of their brands.

A. Research Objective

To analyse customer satisfaction with laptop design and preferences.

B. Research Methodology

In Digital India majority of young students are using a laptop for their learning and their institute is also initiated the process of learning through E-Learning. The laptop manufacturers have to find out the optimal buying behaviour of the end customer's point of view and come out with various new models as per the taste and preferences of the customer. In buying decisions there are both words of mouth and desired or featured technical components also involved before deciding to buy laptops. This study concentrates buying behaviour of the consumer and their interest in different attributes of the laptop and finds the various optimal factors that influence the buying behaviour towards laptops regarding College students.

III. SYSTEM ANALYSIS

A. Objective

According to a literature review, buying a laptop/pc is a big issue, to overcome this issue our website helps to buy at a good affordable price as well as it will be very easy to differentiate between different kinds of laptop/pc and will also get the latest updates regarding this gadget.

B. Existing System

This kind of website already exists, but on our website, it's easier to get a desired laptop/pc by using our chat bot method as it allows the user to ask a sort of question and according to it will provide the desired output in only maximum 2-3 output so that it will be easy to buy.

Disadvantages

1) A little bit of time taking while using the chat bot feature
2) It will show the Laptops/PCs only available in India
3) The international buying option is not available

C. Problem Statement

As it is difficult to get the dream laptop/pc, but now by using our website it will be a bit easier to get the desired laptop/pc just in a few minutes but will be a long time if anyone uses the chat bot feature.

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IV. SYSTEM REQUIREMENT

A. *Hardware Requirement*

1) Processor- Intel i3 (at least the 8th generation)
2) RAM- 8GB
3) Screen resolution- 1080 x 2160 pixels
4) Processor speed- 1.3 GHz to 3.2 GHz
5) Graphics- Integrated
6) An Internet speed of 500kbps

B. *Software Requirement*

1) VirtualBox (or) VMware
2) Operating System: Cross-platform (Windows/Linux/Mac os)
3) Java, Javascript, HTML, Python, SQL, CSS
4) Version control like GitHub, Wix, etc

V. SYSTEM DESCRIPTION

A. *Proposed Methodology*

This is with the importance of problem statements in mind. We implemented a user-friendly chat bot feature in our website so that people can get their desired laptop/pc components according to their needs, we have also provided links to buy them through trusted websites such as the AMAZON, FLIPKART and not only that we give the user the best 2-3 output of the input data they have entered.

B. *Advantages*

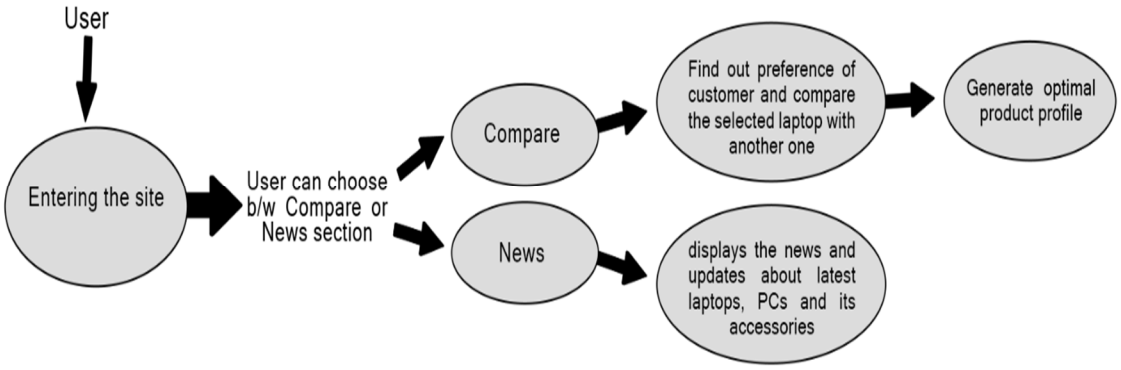
1) Only 2 to 3 desired outputs of the search
2) Less time, more output
3) The best deals in buying option
4) Latest news about laptops/pcs components
5) Availability of components

VI. IMPLEMENTATION AND RESULTS

A. *Objective*

In this chapter, we will be discussing in detail the system architecture of our project. We will also be displaying our architecture model to get a brief view of our project.

B. *System Architecture*



Architectural design diagram

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Attributes	Bundles							
	1	2	3	4	5	6	7	8
Brand	Dell	HP	Asus	Sony	HP	Dell	Sony	Asus
Operating System	Linux	Linux	Linux	Linux	Windows 7	Windows 7	Windows 7	Windows 7
Screen Size	13-13.9 Inches	14-14.9 Inches	13-13.9 Inches	14-14.9 Inches	13-13.9 Inches	14-14.9 Inches	13-13.9 Inches	14-14.9 Inches
RAM	1 Gb	1 Gb	2 Gb	2 Gb	4 Gb	4 Gb	6 Gb	6 Gb
Hard Disk Capacity	500 Gb	2 Tb	1 Tb	1 Tb	1 Tb	1 Tb	500 Gb	2 Tb
Processor Type	Intel Quad Core	Intel Dual Core	Intel i3(th gen)	Intel i5(th gen)	Intel Quad Core	Intel Dual Core	Intel i3(th gen)	Intel i5(th gen)
Graphics Card Memory	500 Mb	1 Gb	2 Gb	1 Gb	1 Gb	2 Gb	1 Gb	500 Mb

Table 1: Attributes and levels of the Conjoint Study

Attributes and attribute levels of the Conjoint study.					
Attributes / Levels	Level 1	Level 2	Level 3	Level 4	Level 5
Brand	Dell	HP	Sony	Asus	Acer
Operating System	Linux	Windows 7	Windows 8.1	Windows 10	
Screen Size	13-13.9 Inches	14-14.9 Inches	15-15.9 Inches	16-16.9 Inches	
RAM	1 Gb	2 Gb	4 Gb	6 Gb	
Hard Disk Capacity	500 Gb	1 Tb	2 Tb		
Processor Type	Intel Quad Core	Intel Dual Core	Intel i3(th gen)	Intel i5(th gen)	
Graphics Card Memory	500 Mb	1 Gb	2 Gb		

Table 2: Optimal Bundles

Attributes and Levels	Averages
Dell	3.54
HP	7.96
Sony	10.14
Asus	12.98
Acer	10.2
Windows 7	15.32
Windows 8.1	13
Windows 10	7.82
1 GB	5.14
2 GB	3.8
4 GB	5.84
Intel core i3(5^{th} gen)	3.88
Intel core i5(5^{th} gen)	4.56
500 MB	4.82
1 GB	6.54

Table 3: Part Worth of Attributes and Levels

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First, we need to get a domain name which is unique and very suitable for our website. The next step is to prepare a design of our website which shows what our project (website) looks like. Further, the building of a website takes place using languages – Python, JavaScript, HTML, Java

HTML tells a web browser how to display things. It translates code into a logical presentation.

A chat bot is created for easier communication with the user. The chat bot will be implemented in such a way that it asks the user some questions related to the product they need so the website could filter out very less results, becoming easier for the user to choose.

After entering the site, the user can go either to compare section or the news section. In compare, section users can compare the laptop models and choose the best model for their needs. In the news section, users will be provided with the latest updates on laptops, PCs, and accessories about section gives information about the website and the creators.

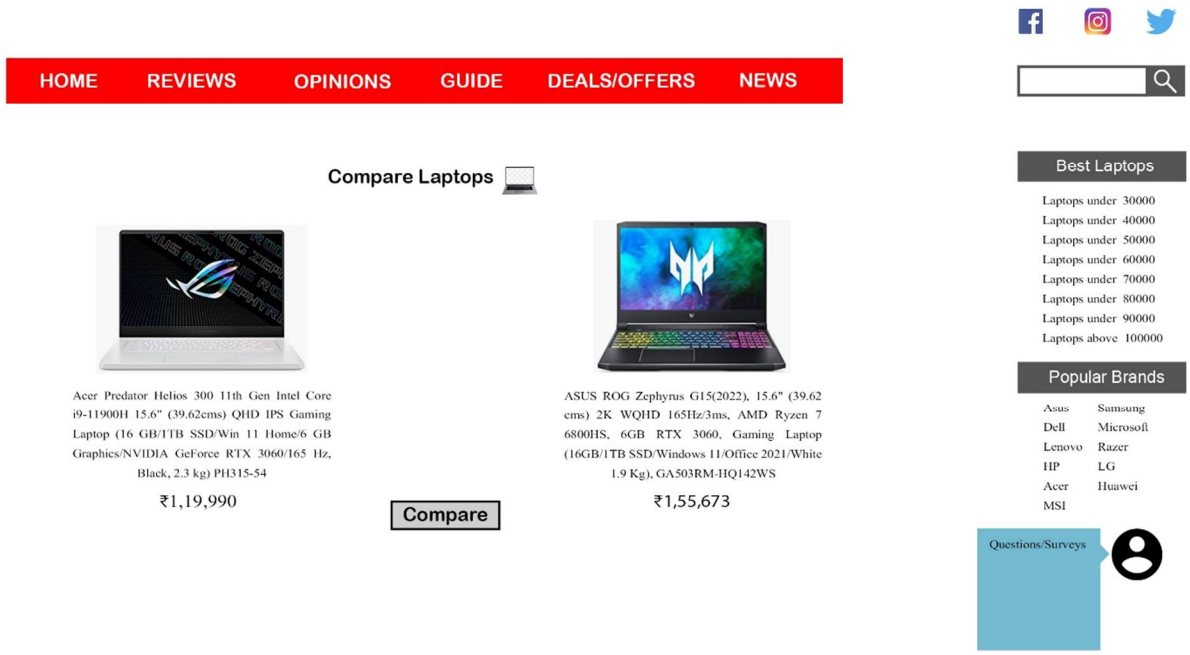
C. Modules Used

1) *Chatbot:* Bots are made up of algorithms that assist them in completing jobs. By auto-designed, we mean that they run on their own, following instructions, and therefore begin the conservation process without the need for human intervention. These bots collect information from the users to filter out the laptops that they need based on specifications, looks, cost, etc.
2) *Social Media Links/Buttons:* These are the links in the form of their logos which when clicked by the user, will be redirected to our respective social media accounts so that they could find information on our page, seek help, and get answers to their queries/questions.
3) *Search Box:* A rectangular field on the screen that accepts typed-in text to look up something or launch a search. It's used to search the models of laptops through our sire. The results will be taken from various sites like amazon, Flipkart, etc.
4) *Menu Bar*

This bar contains several buttons:

a) "Home" button - is used to get redirected to the homepage of a website.
b) "Compare" button – It is used to compare the prices and specifications of laptops
c) "News" button – This tab when opened displays the latest updates and news of laptops, PCs, and their Components.
d) "About" button – contains information on our website

D. Results



Website Design

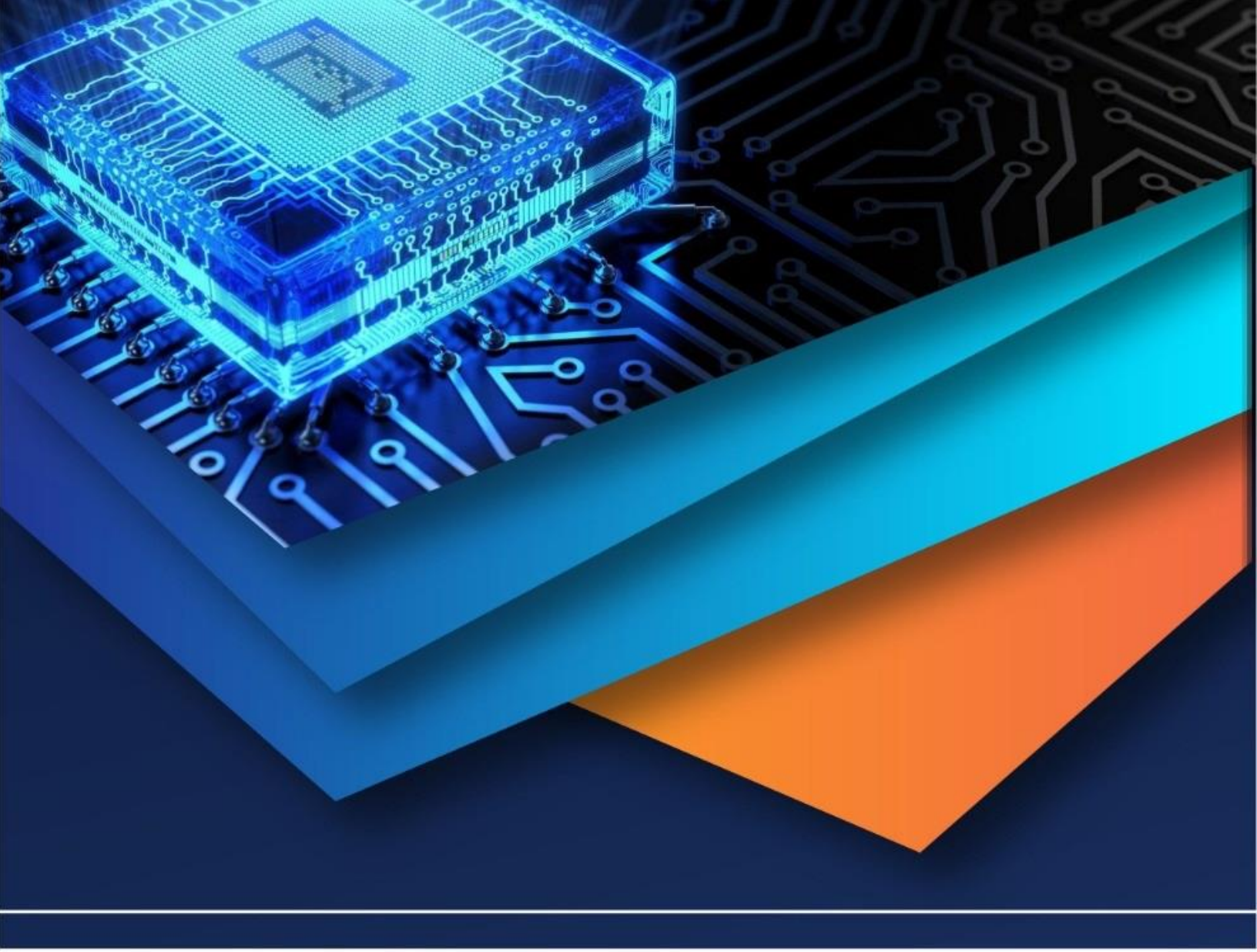
VII. CONCLUSION

Every day we all use laptops/ PCs, but it's very difficult to find a perfect laptop for personal use or in use for an organization. As for this, we came up with an idea to get the perfect suitable laptop/pcs that to in the budget through our website with the help of our user-friendly chat bot who will help our user to answer some of the questions which in return tell you the best suitable laptop/pcs to be bought. Not only this our website will also allow you to access all the latest news regarding pc components or any upcoming brand-new laptop. Our website also gives you the option of buying through the extended link for the top shopping websites like the Amazon, Flipkart, etc. it will help people to get sure which product to buy as it will only show the best 2-3 output with the recent price.

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