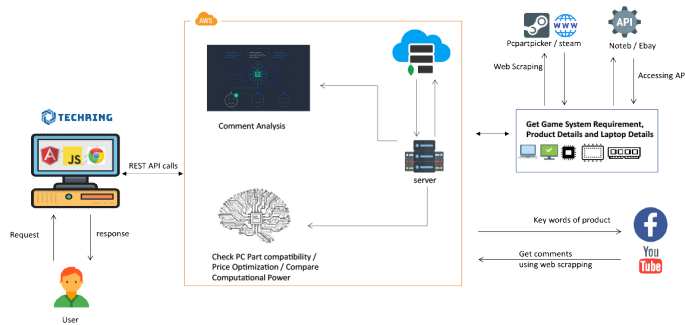


RESEARCH PROBLEM

People find it difficult to find PC parts or laptops that match their requirement while aligning to the budget limitations. This is a common issue faced by many people in the Gaming Industry. This has been a difficult task mainly due to the below-mentioned aspects.

- Multiple Brands, Versions availability, What's best for the customer requirement?
- Multiple vendor options. Who gives the best price?
- Different games demand different hardware specification. Which parts mostly matches the requirements?
- Same product has different prices due to the numerous vendor options.
- Difficulty in finding compatible PC parts
- Users have limited technical knowledge
- Necessity to view analyzed customer comments
- Users need to compare laptops and select the best one

SYSTEM ARCHITECTURE



BACKGROUND AND LITERATURE

"TechRing" is a web-based online assistant with the slogan "We Make the Right Choice for You", developed to assist people who are looking for best hardware solutions which match their requirements and budget friendly. This is specifically designed on focusing gaming and student population in Sri Lanka.

- We found that to get the PC part list, assembly sequence can be used
- Using point base algorithm and expert system we can analyze computational power and compatibility of PC parts

Functions	PCPartPicker.com	NewEgg.com	Noteb.com	TechRing
Select Compatible PC-Parts	✓			✓
Build PC according to a System Requirement Of a Game				✓
Display prices and compare of different vendors	✓			✓
Analyze Comments and display rating based on that				✓
Recommends assemble plan according to budget	✓	✓		✓
Recommend the best PC part in a price range				✓
Laptop comparison			✓	✓
Recommending the best laptop				✓

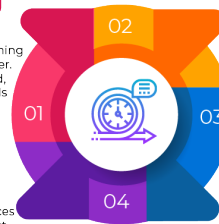
METHODOLOGY

PC Parts Assembling Sequence

Assembling customized PC plans matching the gaming requirements of the customer. This plan will comprised of Motherboard, RAM, VGA and Processor that user needs to satisfy the requirement.

Price Comparison & Optimization

Allows to build the PC assembling plans based on the budget limitation and prices provided by each vendor for one product can be compared. Best products will be analyzed and suggest.



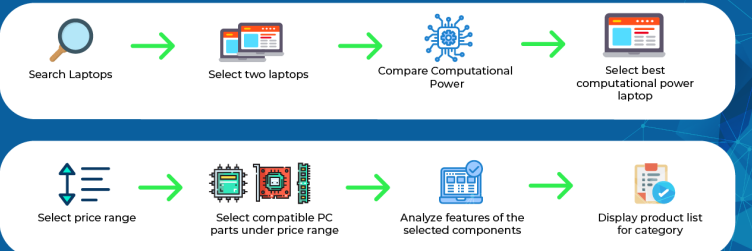
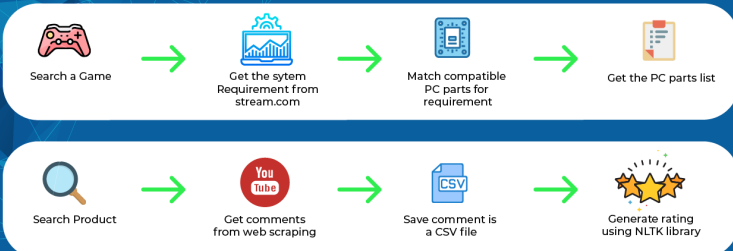
Customer Feedback Analysis

Customer feedbacks posted for each product will be analyzed to detect positivity or negativity of the comments. The analyzed results will be display in a rating format.

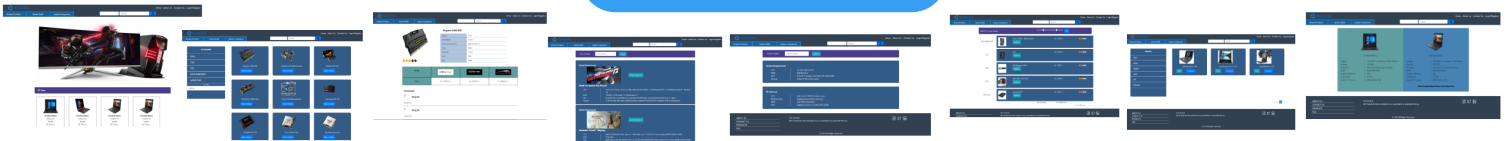
Laptop Comparison & Recommendation

Users are allowed to compare two laptops belong to different brand, model or versions. The best of the selected will be recommended to the user based on the computational power using point based algorithm.

SOLUTION



RESULTS



CONCLUSION

- This platform is intended to assist both hardware component seekers and vendors.
- From the consumer perspective, we help the users in finding the best hardware components considering their requirements & budget limitation by cooperating the previous customer reviews in recommendations.
- Our platform conduct laptop comparison and recommending the best to the user.
- In the future, we would recommend the PC parts according to software requirement apart from Games.
- In the end, we hope to extend these services to the global market and become a universal platform in providing hardware solutions.

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