SURFACED PRODUCT PORTAL BY ACTIVE ASPECT COMMANDING

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ABSTRACT

In the 20th century all around the world is so near to grooming technology. People are interested to make their works easy by using technology. In olden days when a person wants to purchase any electronic gadget he need to first search for most trusted show room. Even he successes in finding trusted show room easily but it is not sure that shop keeper will show all varieties available in specific gadget which customer is looking so for. This leads to confuse the customer in the product selection process and sometimes customer also changes his plan to purchase.

This problem was overcome by most of e-commerce websites by showing the all the available bands in specific variety of product. So for these e–commerce sites are showing available products for user query with the help of linear and fixed ordered facets. This browsing method is failed to save the user browsing time since fixed ordered facets consumes significant amount of time to show user query relevant effective list and it also list the all products which match with query. This is also eliminated by dynamic facet ordering framework by quick drill-down for any possible target product. Here also user spending much time for select the product in e-commerce websites since user may not have previous experience about the performance and quality of product he is look for. In this paper we present a framework for active aspect commanding. It allows already experienced user to leave his comments and give rating to specific product.

In web portal when user searching for specific product, items are listed in descending order of their ratings. This method helps user to complete his shopping in less time and avoids multiple clicks.

I. INTRODUCTION

Now a day's most of the business-to-consumer transactions are become more flexible with the help of E-Commerce websites. All the entrepreneurs are trying to adopt their way of business model to online [1]. In Parallel they also are investing on study and implementation of different models which help to predict the consumer selection behavior. With the help of these prediction models online retailers are able to track the changes in consumer needs time to time [2]. For attracting the consumer online retailers are using technique called facet search. Facet sorting provides algorithms for arranging and maintaining the items list in e-commerce websites [3]. These algorithms will get triggered automatically in two contexts, one in the time of admin adding new items to available list and user searching for a specific product with help of searching query.

WHAT ARE FACETS?

Facets are the subset of filtering, and helping visitors quickly refine their options without losing their way or ending up scrolling through page after page of irrelevant products when they are in search of something very specific.

HOW FACET IS USEFUL FOR ONLINE SHOPPING?

Offering faceted navigation helps all of customers, but it especially helps the searchers. Facets help them narrow their options and find what they came for without having to guess at your catalogue descriptions and structure or do too much filtering and browsing. According to the 'Faceted Search', facet has many classifications one of them is explained below [2].

Aristotle's tree: Aristotle is the first person who created the first comprehensive system of philosophy. He is also established collective knowledge of human race. According to his system classification in living things divided organisms into two categories, plants and animals; Further animals into those 'with blood' and 'without blood'; Those with blood into live – bearing Vs egg-bearing; In these way he framed the science of zoology for the next two millennia. He is also first 'taxonomist'- and he is work is to organizing knowledge into hierarchies. Hierarchies also called as tree structures of representation. He's animal classification is shown in Fig 1.1

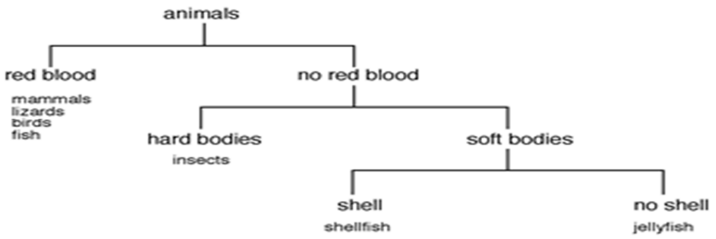


Fig. 1.1 Aristotle's tree of animal classification.

In the above classification it introduces poly hierarchies. It creates more problems than it solves. It is difficult to move nodes when more number of nodes available without sub tree. Faceted classification decomposes compound subjects into flexible component facets with offering expressive power through the independence of the facets.

II. EXISTING SYSTEM

The faceted search system proposed in existing focuses on both textual and structured content. Given a keyword query, the proposed system aims to find the interesting attributes, which is based on how surprising the aggregated value is, given the expectation. The main contribution of this work is the navigational expectation, which is, according to the authors, a novel interestingness measure achieved through judicious application of p-values. These solutions often assume that there is a ranking of the results, based on a preceding keyword-based query or external data, which is often not the case for e-commerce

2.1 Disadvantages of Existing System

- Large number of facets is available. Displaying all facets may be a solution when a small number of facets is involved, but it can overwhelm the user for larger sets of facets
- Currently, most commercial applications that use faceted search have a manual, 'expert-based' selection procedure for facets or a relatively static facet list. However, selecting and ordering facets manually requires a significant amount of manual effort.

III. PROPOSED FRAMEWORK

We propose an approach for dynamic facet ordering in the e-commerce domain. The focus of our approach is to handle domains with sufficient amount of complexity in terms of product attributes and values. Consumer electronics (in this work 'mobile phones') is one good example of such a domain. As part of our solution, we devise an algorithm that ranks properties by their importance and also sorts the values within each property.

For property ordering, we identify specific properties whose facets match many products (i.e., with a high impurity) [3]. The proposed approach is based on a facet impurity measure, regarding qualitative facets in a similar way as classes, and on a measure of dispersion for numeric facets.

The property values are ordered descending on the number of corresponding products. Furthermore, a weighting scheme is introduced in order to favor facets that match many products over the ones that match only a few products, taking into account the importance of facets. Our solution aims to learn the user interests based on the user interaction with the search engine.

3.2 ADVANTAGES OF PROPOSED SYSTEM

- In our study, we use the common disjunctive semantics for values and conjunctive semantics for properties and take into account the possibility of drill-ups. This means that result set sizes are expected to both increase and decrease during the search session, either by deselecting a facet or choosing an addition facet in a property

- In terms of the number of clicks, our approach seems to outperform the other methods, except in the case of the Best Facet Drill-Down Model, where each approach performs equally well. Furthermore, for the Combined Drill-Down Model, our approach results in the lowest number of roll-ups and the highest percentage of successful sessions.

The relatively low computational time makes it suitable for use in real-world Web shops, making our findings also relevant to industry. These results are also confirmed by a user-based evaluation study that we additionally performed.

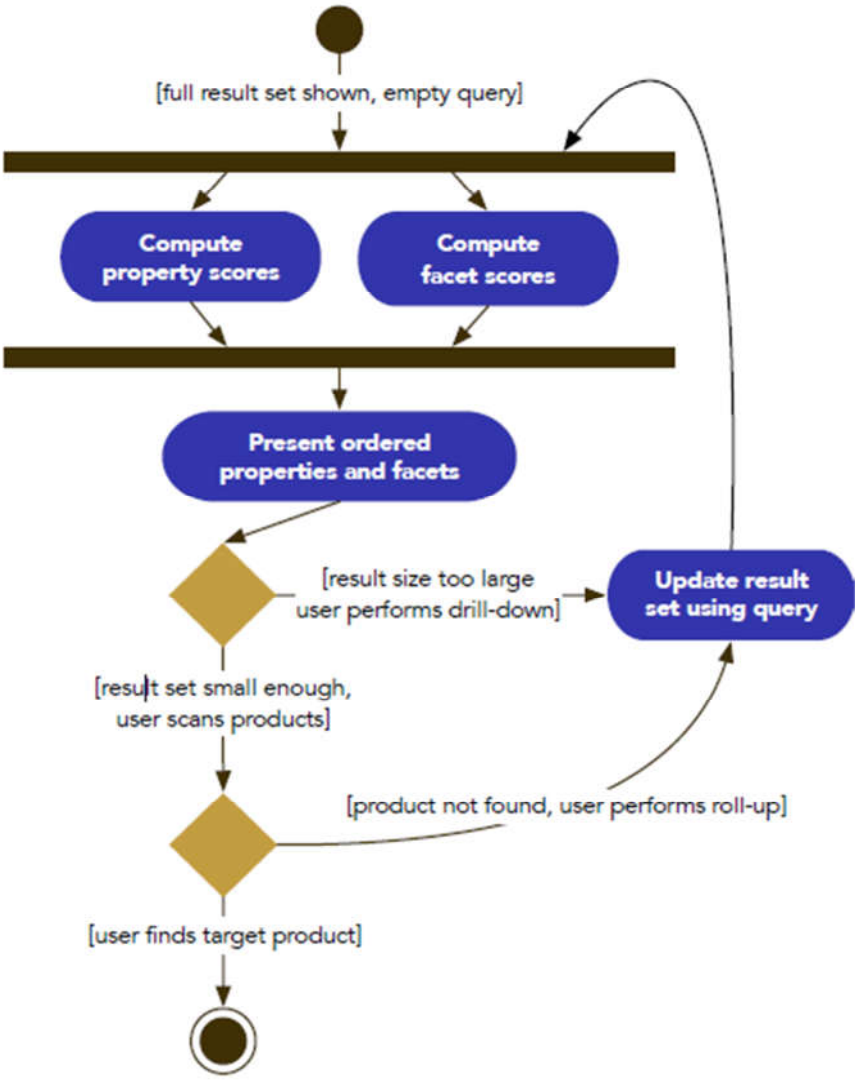
IV. SYSTEM IMPLEMENTATION

4.1 FACET OPTIMIZATION ALGORITHM

Before discussing the details of our approach, we need to elaborate on the assumptions and the used terminology. From the perspective of user interface design, we distinguish between two main facet types: qualitative facets (e.g., WiFi:true) and numeric facets (e.g., Lowest price (e):64.00). We further distinguish between two types of qualitative facets: nominal facets and Boolean facets. Nominal facets are, for example, those for theS property Display Type, and can have any nominal value. Boolean facets are for instance

Multitouch, and have only three options from an interface perspective: true, false, or No preference. Unlike previous studies, our approach treats numeric facets differently than qualitative facets. When creating facets from source data (e.g., tabular data), every unique property-value combination is converted into a facet. For numeric facets, the same process is applied. However, numeric values can be

widely dispersed, especially in large data sets. For facets, however, that would lead to a list of possibly hundreds of different values. One way to deal with that is to create predefined, fixed ranges of values and use these as facets. However, it is never certain whether the predefined ranges will match the user's preferences. Furthermore, fixed ranges can become useless when a result set has only products that fall into one predefined range. For our approach, we have chosen to let the user define custom ranges of values to select. In a product search engine, such custom ranges can be represented using a slider widget. From a technical point of view, however, these custom ranges are considered as selecting a set of facets in one click, i.e., each numeric value is still represented as a separate facet.

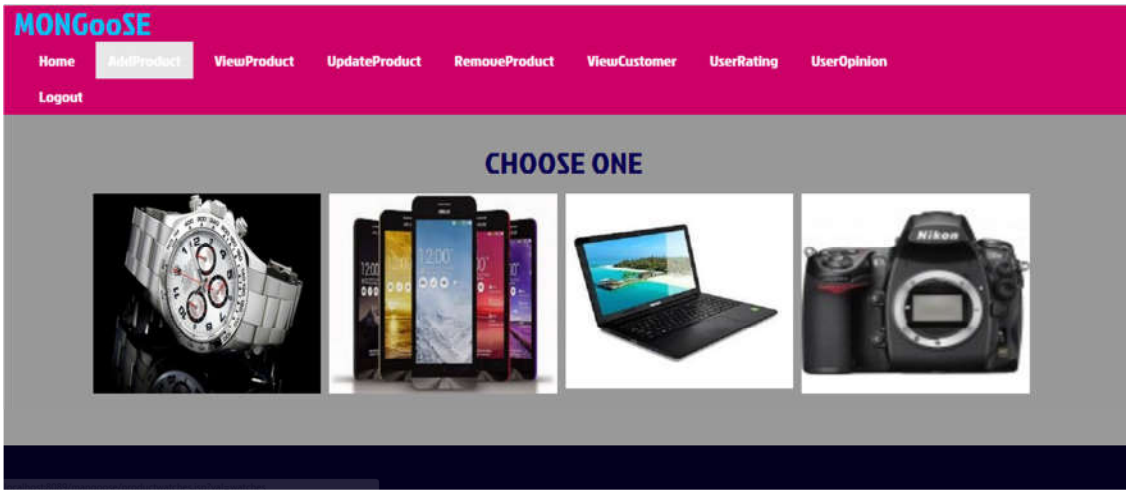


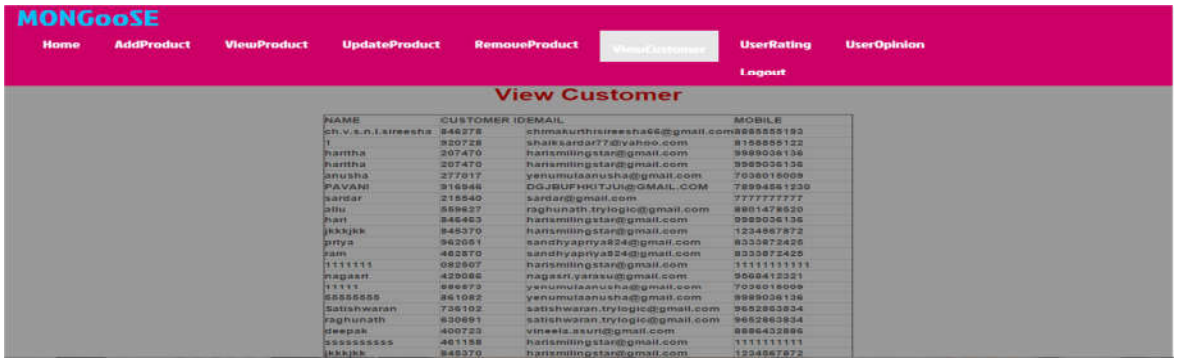
The approach we propose aims to order properties and facets in such a way that any individual product could be found quickly and effectively. We put the leading emphasis on property ordering, as we expect that it

has the largest impact on the user effort. A straightforward way to order properties would be by presenting those properties on top that feature equal-sized facet counts for the facets of that property, which is an effect that is for instance visible in the entropy-based approach of [18]. However, this would still require many clicks in total, possibly leading to long search times. Our approach aims to rank more specific properties higher. The reason behind is that we believe that users are to a limited extent, and possibly unconsciously, aware that selecting more unique features of the target product will result in a faster drill-down. Even in situations where this is not true, ranking more specific properties higher will

increase the chance that the user will use specific facets for drill-down, resulting in a shorter search session duration. As an example consider a user who is searching for a Nokia smartphone capable of playing his collection of MP3 music, and both features are equally important. We expect the user to start by selecting Brand:Nokia instead of Audio Formats:MP3. The user may be aware of the fact that most smartphones are capable of playing MP3 audio, thus selecting that facet will not lead to a quick drill-down. Filtering only Nokia phones will presumably have a much larger impact on the result set than filtering phones that support MP3. The effect of ranking the individual facets (i.e., Nokia vs. Samsung) is assumed to be limited. We expect that popularity is a more suited metric that can be used for this purpose. When the user selects facets from a more specific property, the result set will decrease in size quickly. Since the most specific facets only apply to few products, it would be ineffective to present those on top, as the target product is unknown to the system. Given that we assume that ordering properties has more effect than ordering facets, we therefore compute the impurity of properties as a whole, based on the specificity of its facets. Combined with weighting for the number of products on which it applies, this method will give us those properties and facets on top, that will most likely lead to the quickest drill-down for most of the possible target products. At the same time, the weighting that we introduce lowers the rank of properties with many missing values in the data, as those cannot be employed for drill-down.

V. SCREENS SHOTOS

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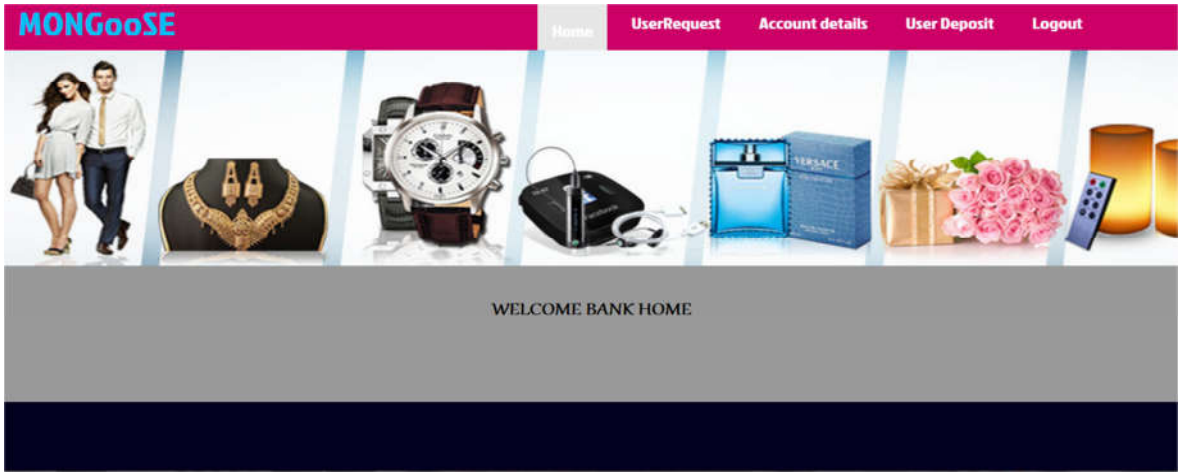
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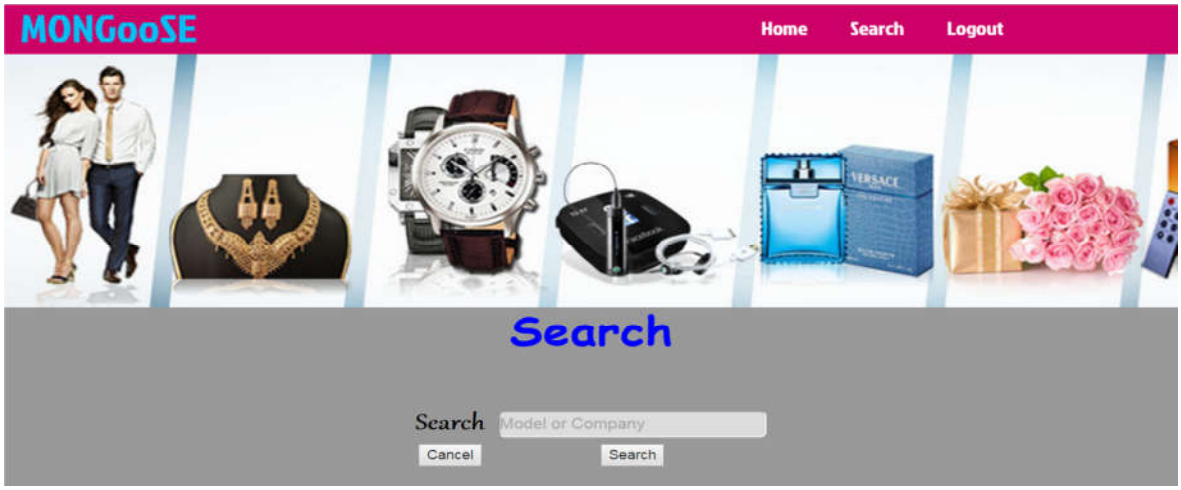
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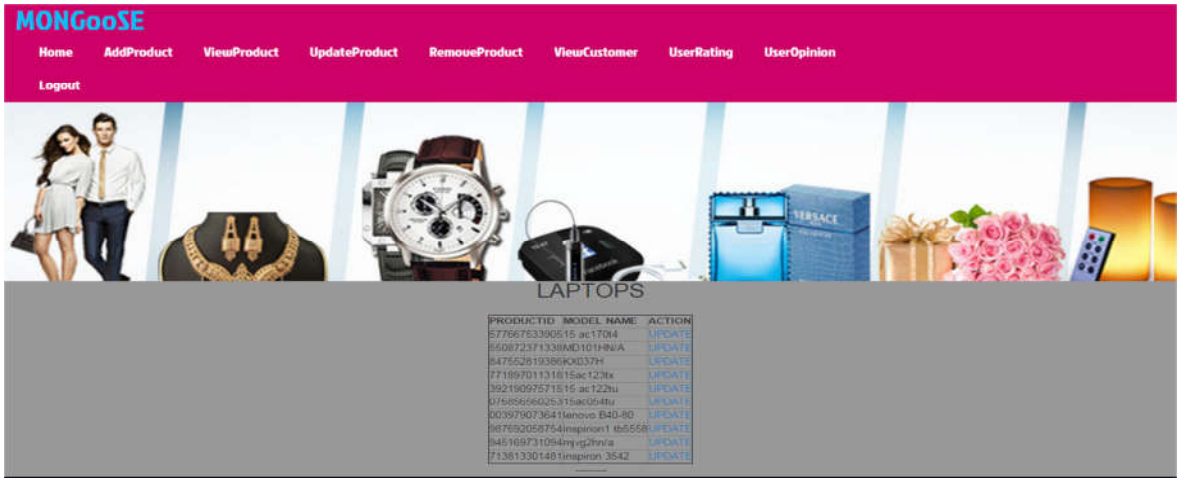

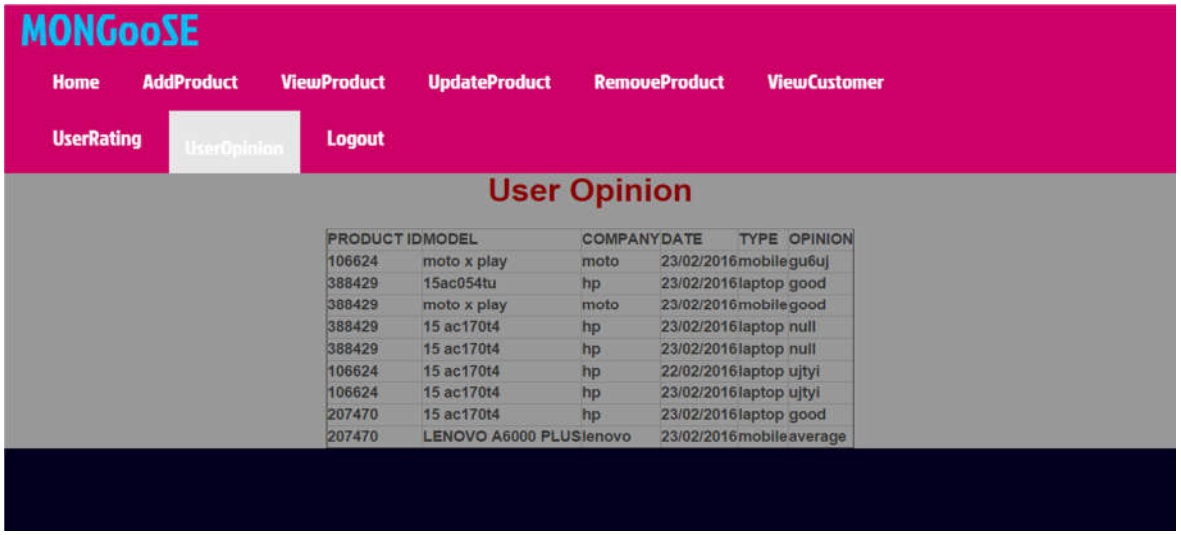

V. CONCLUSION

In this work, proposed a methodology that naturally arranges aspects to such an extent that the client finds its coveted item with minimal measure of exertion. The principle thought of our answer is to sort properties dependent on their aspects and afterward, furthermore, likewise sort the features themselves. We utilize diverse kinds of measurements to score subjective and numerical properties. For property ordering we want to rank properties descending on their impurity, promoting more selective facets that will lead to a quick drill-down of the results [9]. Furthermore, we employ a weighting. Scheme based on the number of matching products to adequately handle missing values and take into account the property product coverage.

While investigating the client exertion, particularly regarding the quantity of snaps, we can reason that our methodology gives a superior execution than the benchmark techniques and now and again even beats the physically accurate 'Expert based approach. Furthermore, the moderately low computational time makes it appropriate for use in certifiable Web shops, making our findings additionally pertinent to industry. These outcomes are likewise confirmed by a client based assessment think about that also performed.

VI. FURTHER ENHANCEMENT

In future work, like to integrate the user selected facets in the optimization process. Such an approach might be able to learn from the clicking behavior of a user and improve the overall performance. Furthermore, plan to evaluate proposed approaches in a user-based study, where can measure other performance aspects, such as the total time of a drill down process.

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