

Online Recommendation of Electronic Goods

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Abstract - System deals with recommendation of products for clients which help them to make beneficial and effective decisions. Also, this helps our users using this recommendation system to get rid of infocication which is a state were users are confused to make a decision or come to conclusion. Our recommending tool will use technologies which will be helpful for making precise decisions thus leading to quality recommendations. Use of GPS, for location detection of client using his or her android application and also use of natural languages processing for semantic analysis and review processing. The system we have developing is for electronic goods recommendations for our clients from local market. New electronic products will be recommended as per user search history.

Keywords: Recommendation system , Semantic analysis, products, NLP.

1. INTRODUCTION

We are going to develop a system to give recommendation about electronics product from local market in form of notifications. Recommending Systems are new generation dynamic internet tools that help user for effective product search via Data on the internet and obtain data related to their preferences.

The recommended procedure mentions the semantic products to the clients and is initially based on semantic analysis and product classification. The system will have product information from local market. All product related data will be stored with it. Trusting upon clients, Global Positioning System (GPS) location references will be given to the user using android application

. Also the references will be formed on the basis of reviews of product. And while giving recommendation to customer, his budget will be considered. Hence we will be developing a system to give recommendation about electronics product from local market.

2.1 Purpose

Determination The main axiom of this system is to maintain all related data about the properties which is suggested by the online system.

This system is gets recommendation of all searched product which is searched by the Android user.

System gives the analysis on any product. To need a reduced the overload of the product, shopkeeper, related websites.

We announce a semantic reference procedure which is more efficient.

2.2 Scope

The system will have product information from local market. All product related data will be stored with it. Dependent upon clients GPS location references will be given to him using GSM.

Also the recommendations will be formed on the base of reviews of product and while giving recommendation to customer his salary will be considered. This system gives a proper desired output to the customer according to the searched product it will consider all the circumstances which is related to the product, person, review and salary.

The main objective of this system is to provide a possibility to the customer.

3. Algorithm

3.1 Trilateral Algorithm

Trilateration is an ideal model. The three circles intersect at a point when there is no error of the measured distances between nodes and this point is the location of the mobile node. However, in actual situation the error of the measured RSSI is existent.

The three rounds won't intersect at a point because of the measured error, but usually they intersect at a region. Taking the centroid of the region as the location of mobile node is the idea of trilateral centroid algorithm. NTCWLA is an expansion of trilateral centroid algorithm. First we select n (n=3) reliable beacon nodes from all beacon nodes, then we calculate the distances between reliable beacon nodes and MOBILE NODE WITH FORMULA.

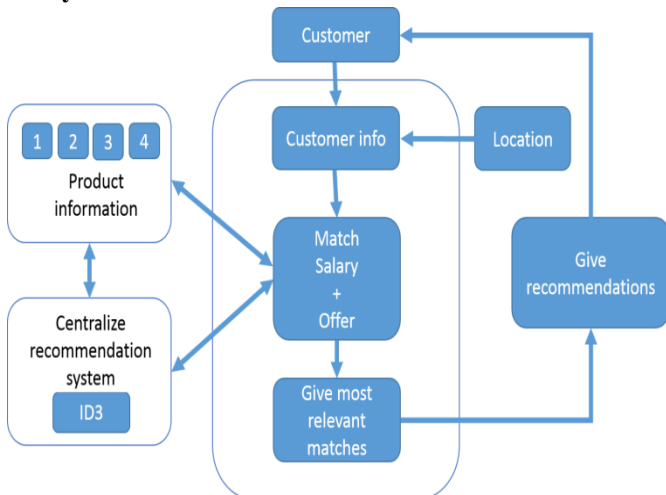
Next we combine any three of the n reliable beacon nodes to calculate the location of mobile node with the trilateral centroid algorithm and this algorithm is executed $N \binom{3}{n} \binom{n}{n}$ times. After that we get $N1$ ($N1 = N$) reference coordinates of mobile node and use the weighted average of the $N1$ reference coordinates to filter out the reference coordinates which have large deviation with it. For example, the value of deviation is more than 20cm.

4.1 Architecture and Implementation

The previous recommendation system or online shopping portals and is not feasible to show the location based electronic product which has higher recommendation or the higher review. Those system are not able to send the information of the product which is nearby available and also affordable according to the salary.

But this system eliminates the problem with a semantic recommendation procedure for electronic product. The main elements include showing of web objects, category of the web objects, matching between and across item and purpose of the set of the action to be recommended for personalization. Firstly, choose ontology language for product arrangement and proposed an Online recommendation system using LCS Algorithm. The architecture consisted of online and offline phase. The accuracy of prediction is 73%. Semantic information for WUM based recommendation. They have used spade algorithm to generate frequent access sequences. Spade Algorithm is a sequential association rule mining algorithm.

4.2 System Architecture



4.3 Product Function

Admin Module:

- No registration for admin by default user role is 1
- Admin can register/add shop, edit and delete shop.

Shop Module:

- Shop has by default role 2

- Shop log in to user id and password, registered by admin.
- Add product, edit and delete product.

Customer Module:

- Customer has by default role 3, -first customer registers and then logs in, - and first time sees all products.
- Search based on products category like mobile, laptop, etc. and also product range (for ex-mobile range 10000 to 20000).
- Also search on brand name or product name (ex- dell, hp, etc).
- Customer history stored on database, based on their search.
- Also give comments to particular product and apply sentiment analysis based on “positive”, “negative” and “neutral”.
- When they again log in then based on their last search recommend all products based on comment rating given to them.

Android Part:

User register and then Log in.

- User is shown category and user selects category, then product is shown with shop Location, then user marks product for buying.
- Location Reminder is given when user enters the particular area, then automatically gets notifications on user’s phone.

5. CONCLUSION

The new generation tools which suggest good quality recommendations are nowadays known as recommendation systems which process the specific data providing data specific requirements. Tools like recommendation systems use many algorithms and techniques like semantics and processing of language which in turn provide suggestion which are known to be recommendations. This recommendation systems are most preferred tools for decision making when it comes to choosing from many options which are available.

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