

INTELLIGENCE INDUCED LOCATION PERSONALIZED DATA SERVICE

SiniJoy P J

PG Scholar, Dept of IT.

Sri Sairam Engineering College, Chennai-44.

sinijoy15@gmail.com

Dr.T.Sheela

Professor, Dept of IT.

Sri Sairam Engineering College, Chennai-44.

hod.it@sairam.edu.in

Keywords- *RSVM ,LPDS, Clickthrough data, concept, location search, mobile search engine, ontology, personalization, user profiling*

Abstract— Nowadays, people are using mobile phones for searching required data. But the major problem in mobile search is that the interaction between the users and search engines are limited by the small form factors of the mobile devices. In this research we propose a LPDS (Location Personalized Data Service) that captures the user's preferences in the form of concepts by mining their click through data. User's location are captured by using the GPS. The user preferences are organized in an ontology, which are used to adapt a personalized ranking function for rank adaptation of future search results. In our proposed design, the client collects and stores locally the click through data and the user privacy is maintained without sharing the user preferences with the server. For efficient search the user is provided with two modes thus making the search results more refined and efficient and the option of including the location is also provided. The main aim is to assist Smartphone users with the best suggestions in the results they look for taking advantage of the google's search result ranking GPS tracking and user preferences in an aim to reduce the number of click through the user makes in his Smartphone making Smartphone as smartest phone for its users.

I.INTRODUCTION

A major need of all android users is to get more efficient search results. In most of the existing systems the search result are displayed and re ranked according to the users location. User preferences is not taken into consideration and the user is not provided any option of what type of search does he wants. In order to return the most intended result the user preference and the users location must be taken into consideration. The user location is tracked by using the GPS system.

In the proposed LPDS system the user preference is build by mining the click through data. It considers the user click through are of the user interested field. If suppose a user enters a query "apple" the concept he may be thinking is of the apple company and the others user content will be fruit. So two users has two different concepts thus the LPDS system profiles the users preferences based upon the users interest thus re ranking is done on the basis of the interested field. Ontology is constructed both in the client and the server side thus the users preferences is maintained in the client in one ontology and the server ontology maintains the relevant words.

II. RELATED WORK

In the existing system the user preferences are send to the server thus server re ranks the result based on the user preference[1]The location is extracted by using the GPS system and the search is performed each time by searching the query along with the location. To maintain the user preference ontology is maintained in the client side and in the server side a separate ontology is maintained for both the location and the content. In the other paper the location preference is taken into consideration[2] the re ranking is performed based on the users location thus the results are re ranked according to their individual location. The privacy is preserved by including two privacy parameters[2] minDistance and expRatio. The user has to specify the privacy parameters and depending upon the value the user preference is shared with the server.

III. PROPOSED WORK

The client query is entered along with the mode preference for both search and location . After receiving the client query and preference the server searches for the query and the search results is obtained. The dictionary based ontology is developed in the server side and the query is compared with the dictionary word and the content is identified. According to the content the search result is re ranked. The user’s click through data and user preferences are not shared to the server to protect the privacy. Re ranked result is then send to the client side if the mute mode is the user preferred mode the results is displayed. Full mode then the results are re ranked based upon the user preference. The Architecture of LPDS is shown in

thefigure2

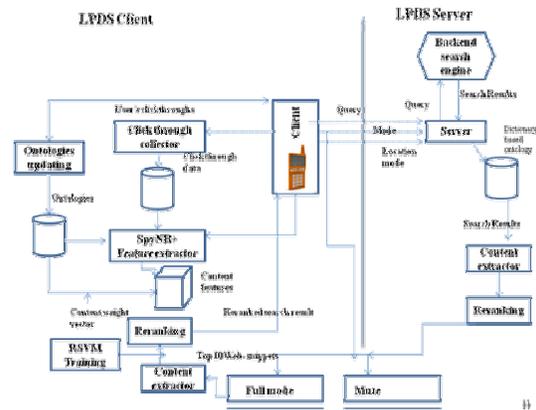


Fig 2 Architecture

The response will be parsed and re ranked if full mode is activated else it is listed directly. In full mode, the response is parsed and ontology is been searched for the searched query for which the response has come. if a match is found then re ranking takes place based on content weight vector, rsvm training and its been listed. If it does not exist an entry is made in the ontology and presented to user without re ranking. Based on the click through which the user clicks the ontology is updated with the weight for the search term. Thereby increasing vector weight each time user clicks. Based on these weight ranking takes place in the next search session. The major advantage of the proposed LPDS system is the improving the efficiency of the system. LPDS is a user friendly application with an option of turning on and off the location and the re ranking.

IV. IMPLEMENTATION

Initial stage of the paper is user interface development and the server client connectivity search results are parsed and displayed to the user. The user interface is deployed by using android SDK and windows as operating system.

The user interface is developed and the query from the user is received. The client server

connectivity is established and the server is setup using the internet information service manager(IIS) For the query entered by the user the results are parsed in the server page and the final result is displayed. This process is implementation is shown in the figure 3

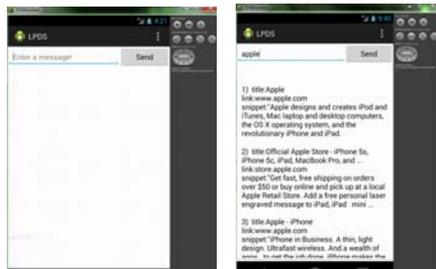


Fig 3 Implementation

V.CONCLUSION

To provide the best intended results to the user the reranking is done based on the dictionary words and the content. And the LPDS system is a user friendly application with an option of selecting the location and the mode of preference. The number of HTTP request is reduced .Thus the efficiency and the performance is improved considerably. LPDS is the system that uses both the location and the content. And the privacy is preserved since it does not shares the user preferences with the server.

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