

ANDROID MOBILE SEARCH ENGINE WITH USER PERSONALIZATION



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ABSTRACT:

The primary problem in mobile search is that the interactions among the users and search engines are limited by the small screen of the mobile devices. To give more relevant results to the users, search engines must be able to create a user's profile, including interests and personalizing the search results according to the user profiles. The proposed personalized mobile search engine is an innovative approach to personalize search query and corresponding

search results. The Proposed system takes the help of Google's GPS service to detect user location and location-content mining concept to personalize the search query as per query type. And also uses the user profile and user interest to modify the user query close to user personal approach to find anything on the internet. Proposed system uses Google, yahoo and Bing search engine's API's to search out the personalized query which returns search results. The returned search results are again rearranged in different categories as per previous click through history of the user. It helps user to get almost close results from three different search engines. The proposed system preserve the user privacy, which are specified as two privacy parameter true or false value. The Proposed system provided the city

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travel/tour guide system which was also personalized. It will collect the information from location based query that will be identified by location-content mining concept.

KEYWORDS

mobile search engine, personalization, privacy setting, click through data.

INTRODUCTION:

In the current trend internet plays an important role in communication and information sharing. As increase in Internet users and accessible web pages, it is becoming progressively more difficult for users to obtain information those are appropriate to their requirement. Users need to browse a large categorized of concepts to obtain the information for which the user is looking for or give a query to a globally available search engine and search through thousands of search results, most of them are unimportant. Most existing web search engines return a set of search results for giving user's query without considering the user's specific interests. Therefore, for the same query from different users or in different background will give a set of results and the same search result will display for all users in one common way. In the current web page /document, as the amount of available documentary information going to overwhelm, its demand for personalized technique to access document increases. The Personalized systems provide solution this problem by creating, handling, presenting information for reform each user. This reformation may extract out unimportant information and/or determine additional document information about user interested.

RELATED WORK: The primary problem in mobile searching is that the communication between the user and search engines are very limited due to the small screen of the mobile system. As a search result, users of mobile try to give shorter, hence more uncertain queries compare with their web search. To give more relative results to the users, search engines must able to create user's profile, including interests and personalize the results according to the user profiles. The technical approach to obtaining a user's interest in personalization by examining the click through data. [4] Implemented a search engine based on user's preferences with personalization method and proved that it is more realizable methods that are supported for web page preferences. [7] Proposed to analyze, document predictions from click through data. Furthermore, [8] suggest combining both a spying technique with a novel voting technique to find user preferences. Search queries can be categorized as content or location queries. It was discovered that several queries were location queries are focusing on location information. To deal with the queries that concentrate on location information, as many of location related search systems have been developed for location. [6] Proposed a location relative search system for webpage documents. Location related information was derived from the web pages that are converted into a combination of latitude-longitude points. All above existent personalized search systems are based on click through data to determine user's preferences and all existing location-based search systems, users needs to manually define their location preferences (with latitude-longitude point), or to manually prepare a set of location sensitive topic and they do not address the issues of privacy preservation.

PROPOSED SYSTEM: Normally, when we search anything on the internet, we give the query containing most relevant, number of words which helps in exact result. But, it was not possible when we use small devices like smart phones or normal mobiles having internet facility. It is because of a small

display and hectic typing problem by keypad or by a touch pad. Hence, we prefer to give optimized query. Here, our proposed system comes into picture that gives most approximate and top rated search query result set.

When a user submits a query on the client, the query together with the feature vectors containing the user's content and location preferences are forwarded to the server. Server extracts content and location components, study previous search history and form a search query depending upon the user's profile and preference, content based or location based approach. Such formed query was submitted to server, to obtain the search results from the back-end search engine (Google, Yahoo and Bing). The obtained search results are again rearranged with different category titles as per previous click through history. It helps user to get almost close results from three different search engines. User can also set parameters to profile attributes/fields, whether it should be used or not. The result set returned to the client is sorted and only top rated results are displayed according to user preference and profile that helps user to get exact required information. The Proposed system maintains a log view of users search queries along with preferred search results that helps system to better understand and learn user's profile and preference. When the user clicks on a search result, the click through data along with the associated content and location concepts are stored in the click through a database on the client. Then click through data are stored at the client, so that the server does not realize the how many sets of documents that the user has clicked on. The proposed system protects user privacy in certain degree. The amount of personal information exposed out of user's mobile devices is controlled. Search engine filters the result set according to the user's privacy level setting, that are specified with two privacy parameters, true and false. The privacy preserving technique aims at filtering concepts that are too specific, If the user is concerned with his/her own privacy, the privacy parameter can be set to false so that only limited personal information will be included in the feature vectors and passed along to the server for the personalization. On the other hand, if a user wants more exact results according to user preferences; the privacy parameter can be set to true so that the server can use the full feature vectors to maximize the personalization effect.

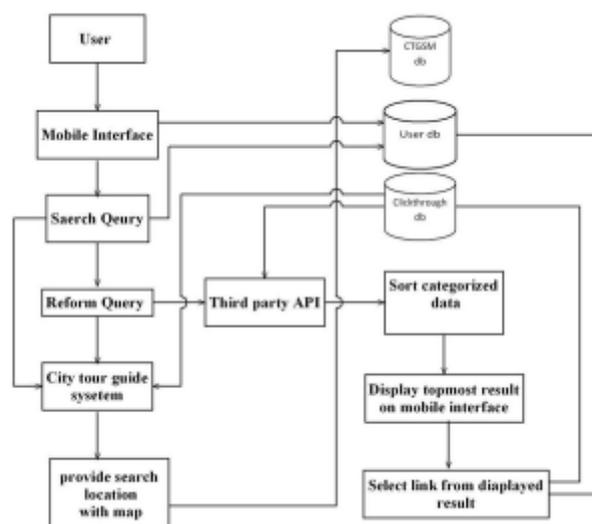


Figure 1.1: Overall System Architecture

As sever maintain a log view of users search queries along with preferred search results which given as input to construct a city tour guide system. Suppose, for same location based query which submits to server, gives more relevant results. Along with result, our client stores user's click through for understanding user's interest and intention. The information viewed by the user was submitted to our city tour guide server, which helps user to find out. Also, it was stored for their future reference. Hence, whenever a user comes to that location, users found a respect location that user visited last time on a city tour guide app in android phone. Also, depending upon the search and click through server provide other locations of user's interest on tour guide app. Hence, city tour guide also becomes personalized same as our search engine. The same server is used at both services.

EXPECTED PERFORMANCE:

The proposed system gives most approximate result set containing only top rated results which are well re-ranked on submitting compact optimized queries by the user. Here, users can get the result set which was most specific such that personalized. It increases search experience of user on small devices like mobile.

CONCLUSION:

The proposed personalized mobile search engine is an innovative approach for personalize search query and corresponding search results. It analyzes both content and location concepts for user profiling and to personalize search query and corresponding search result for a user. The proposed system takes the help of Google's GPS service to detect user location and location-content mining concept to personalize the search query as per query type. The Proposed system also provides the city travel/tour guide system which was also personalized. It will collect the information from location based query which will be identified by location-content mining concept.

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