

Analysis on an Online Social Network Based Question and Answer

Research Scholar Hans Raj Pal, Professor Ritesh Yadav

Department of Computer Science and Engineering,
RKDF Institute of Science & Technology, Bhopal MP India

Abstract – Question and Answer (Q&A) systems play a vital role in our daily life for information and knowledge sharing. Users post questions and pick questions to answer in the system. Due to the rapidly growing user population and the number of questions, it is unlikely for a user to stumble upon a question by chance that (s)he can answer. Also, altruism does not encourage all users to provide answers, not to mention high quality answers with a short answer wait time. The primary objective of the system is to improve the performance of Q&A systems by actively forwarding questions to users who are capable and willing to answer the questions. Also improve Social Network Based Question and Answer system with security and efficiency enhancements by protecting user privacy and identifies, and retrieving answers automatically for recurrent questions.

Keywords– Question and answer systems, Social networks, Information search.

I. INTRODUCTION

The Internet is an important source of information, and the amount of data on the Internet is vast and constantly growing. Users rely on search engines to find specific information within this knowledge base. Search engines such as Google and Bing do a good job of indexing web pages and providing users with pages relevant to their search queries.

These search engines use keywords provided by the users to perform searches; however, there are some specific questions that are not suited for search engines. For example—Where is the best place to get your car fixed in Clemson? Q&A systems have been developed to address this particular class of non-factual questions. Since their inception, Q&A systems have proved to be a valuable resource for sharing expertise and consequently are used by a large number of Internet users.

Current Q&A systems consist of hundreds of thousands of users, so the number of questions asked is also very large. Consequently, when a user intends to answer a question, he/she may be overwhelmed by the plethora of questions needing answers.

Moreover, there are potentially some questions where a user has expertise and can provide a better answer than other users, but there is currently no way for him/her to locate those particular questions among the thousands of posted questions. Also, web Q&A sites such as provide high-quality of answers (e.g. yahoo! Answer and Ask.com) to enhance Q&A sites emerging efforts have been focused on social network.

II. RESEARCH METHOD

1. Proposed System

- We propose Social Q&A, an online social network based Q&A system that actively forwards questions to those users with the highest likelihood (capability and willingness) of answering them with expertise and interest in the questions' subjects. The design of Social Q&A is based on two social network properties.
- First, social friends tend to share similar interests (e.g., lab members majoring in computer systems).
- Second, social friends tend to be trustworthy and altruistic due to the property of "friendship fosters cooperation".

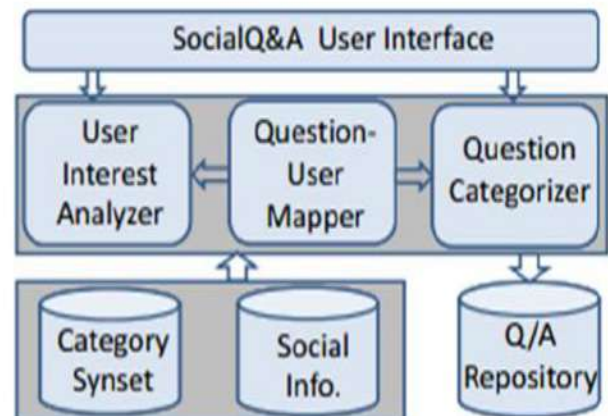


Fig.1. The architecture of Social Q&A.

Figure 1 shows the high-level architecture of Social Q&A and the interaction between the core components: User Interest Analyzer, Question Categorizer, and Question-User Mapper. User Interest Analyzer analyzes data associated with each user in the social network to derive user interests. Question Categorizer categorizes the user questions into interest categories based on the Category Synsets, which stores the synonyms of all categories' keywords from WordNet. Question-User Mapper connects these two components by identifying potential answerers who are most likely to be willing to and be able to provide satisfactory answers. The data from user questions and answers is stored on Q/A Repository to serve subsequent similar questions. Below, we present each component and user interface.

III. SIMULATION RESULT

“Social Network Based Question and Answer System” use the web applications and Data Mining to train the system using machine learning that adapts itself to provide large resources to store the information. The web applications include 2 accounts ‘User Account’ and ‘Admin Account’.



Fig.2. Home Page.



Fig.3. User Login.



Fig.4. Admin Login.



Fig.5. Admin Panel Home Page.



Fig.6. Add Profession Details in Admin Panel.



Fig.9. View Category Details in Admin Panel.



Fig.7. View Profession Details in Admin Panel.



Fig.10. User Login Home Page.



Fig.8. Add Query Category in Admin Panel.



Fig.11. User Profile Details.

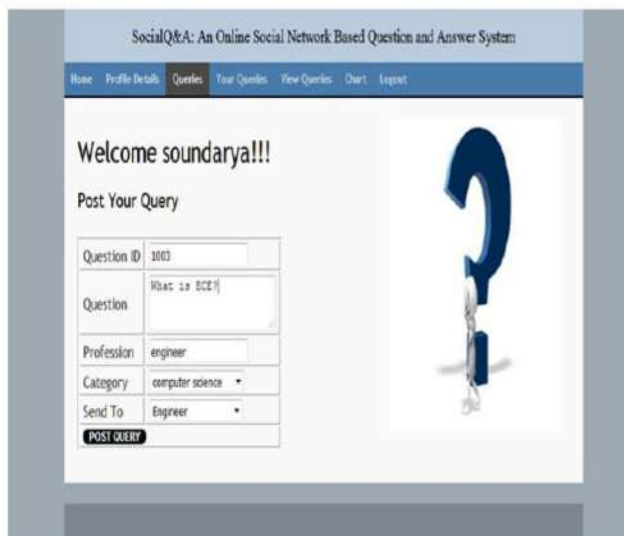


Fig.12. User Post Queries.

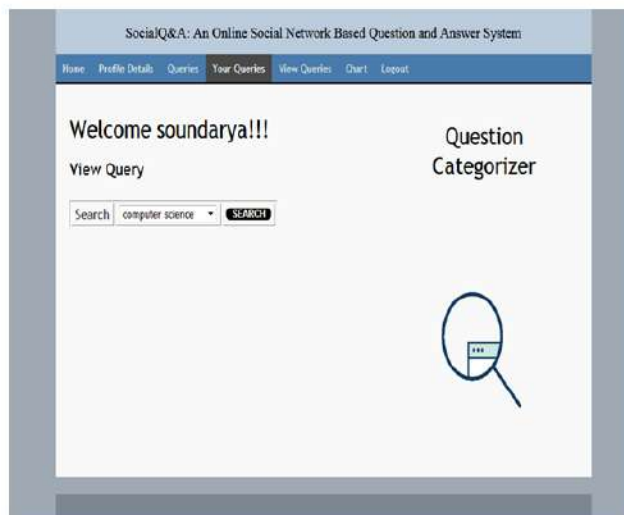


Fig.13. View Query.



Fig.14. View Query's Answerer.

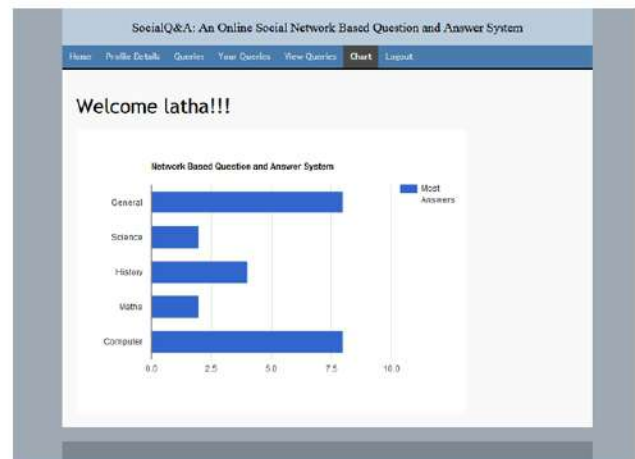


Fig.15. Chart of the Answers.

IV. CONCLUSION

In our project we are providing high quality reply with significantly less holding up time to quantity of users. For high quality answer and significantly less hold up time we have developed and prototyped an on the internet informal community based mostly Q&A framework, known as referred to Social Q & A. Question and Answer systems are used by many people for purposes such as information retrieval, academic assistance, and discussion. To increase the quality of answers received and decrease the wait time for answers, an online social network based Question and Answer system is developed. It utilizes the properties of a social network to forward a question to potential answer providers, ensuring that a given question receives a high-quality answer in a short period of time. It removes the burden from answer providers by directly delivering them the questions they might be interested in, as opposed to requiring answer providers to search through a large collection of questions as in Yahoo! Answers or flooding a question to all of an asker's friends in an online social network.

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