

An Open Chat Model For Question Answer Based on Crowd sourcing

Prof. M.S Khatib¹, Prof.NaishaTaban², Prof.Farheena Sheikh³, IffatSaleha⁴, Sana Khan⁵
^{1,2,3,4,5} Dept of computer science and engineering
^{1,2,3,4,5} Acet Sadar ,Nagpur, rtmnu,Maharashtra

Abstract- Today people use the Internet to find the answer to their questions. They mostly rather ask other users on Community Question Answering (CQA) sites for an answer than just searching the web. However, as Social Media becomes more popular, users tend to ask their questions .these networks, and ignore the benefits CQA sites offer. On the other hand, automatic Question Answering (QA) systems are unable to comprehend questions including images and implementing necessary algorithms for such systems is expensive. In this paper, we propose QA process based on Crowd sourcing, which runs on a QA open system. The system benefits from Crowd sourcing advantages, besides automation techniques.

Keywords- Crowdsourcing; Web; Question Answering

I. INTRODUCTION

Internet users usually use search engines to find the answer to their questions. However, when they fail to transform their needs such as a short query, they assume that they will not find the answer to their open questions, personal questions and the ones associated with specific conditions into complicated questions by searching the web pages directly, and that a real human being would understand their problem much better than a machine. In these cases, users usually would prefer to ask their questions on Community Question Answering (CQA) sites such as Yahoo! Answers, Quora and Stack Overflow, rather than issuing a query to a Web search engine, this way other users could provide the answer. Moreover, in order to find the answer to a question in web pages using search engines, the user must choose suitable keywords which note very user is capable of. Increasing number of questioners in CQA and the few accounts providing answers, has led to an increase.

In unanswered questions. The results of a research done on Yahoo! Answers show that 15 percent of all English questions, have remained unanswered and that 25 percent of the questions in each category are repetitious.

II. PROBLEM DEFINATION

Modern search engines have made dramatic progress in the answering of many user’s questions about facts, such as those that might be retrieved or directly inferred from a knowledge base. However, many other questions that real users ask are more complex, such as asking for opinions or advice for a particular situation, and are still largely beyond the competence of the computer systems.

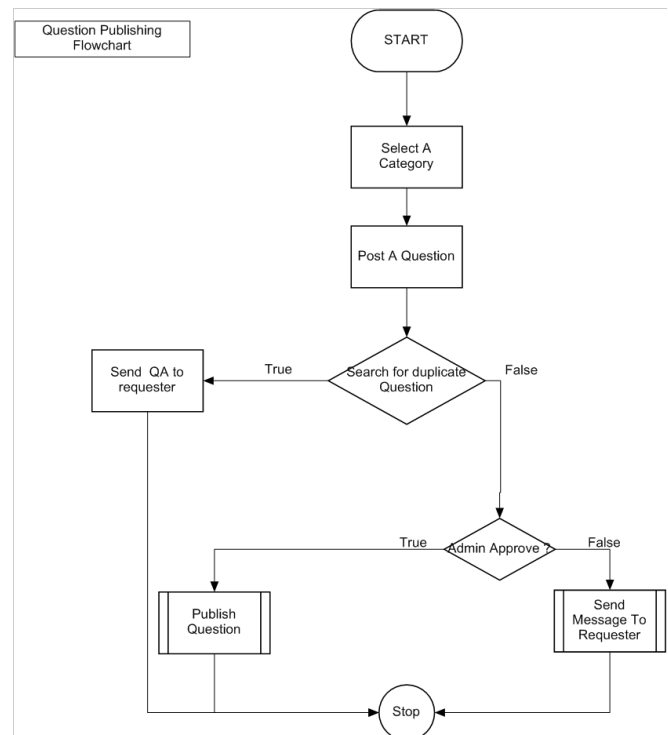


Fig1: Application Flow Graph

III. THE PROPOSED PLAN

The main purpose of this research was proposing a QA system based on crowdsourcing platform using java technology. Our CRQA (Crowd-powered Real-time Question Answering) system represents a hybrid system, which includes an automatic question answering and crowdsourcing modules. The system integrated with an publisher and subscriber module and android app that act as a client for the system.

- Admin: The main job of the admin is to monitor all the data that flows on application. In short, it will perform site administration. It is also responsible for approving or disapproving a question submits by publisher.
- Publisher (requester): Publisher is basically the person who wants to ask a question. He can be a subscriber if he has knowledge about certain question or topic.
- Subscriber (crowd worker): Subscriber are the person who answer the question. He will have to subscribe to a particular category and then answer the questions of that category. If he has query regarding any category, he can be a publisher too.
- Categories Service: It will handle all categories' functionality. We use servlets to implement categories services.
- Questions Service: It will handle all questions related functionality. We use servlets to implement questions services.
- Answers Service: It will handle all questions related functionality. We use servlets to implement questions services.
- Open Chat: Open chat system will be used, in case, if the person has some difficulty in understanding the question or answer.

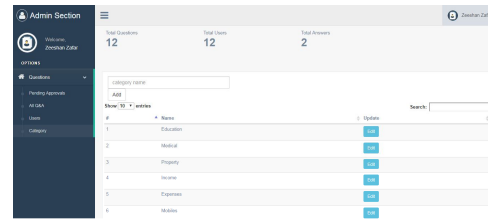


Fig3: Categories Service

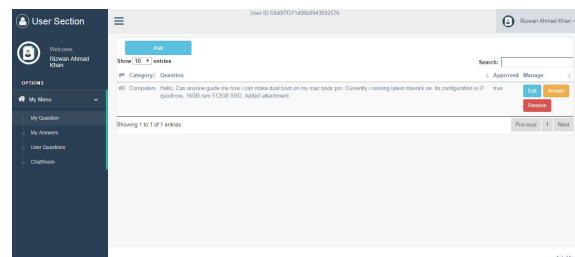


Fig4: Question Service Module

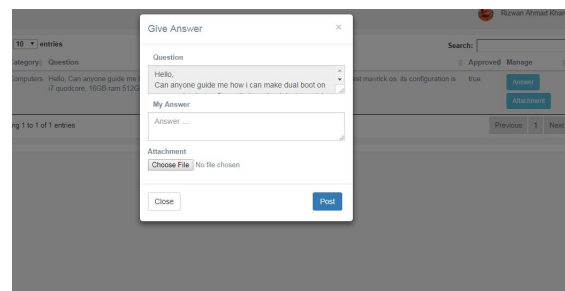


Fig5: Answer services Module

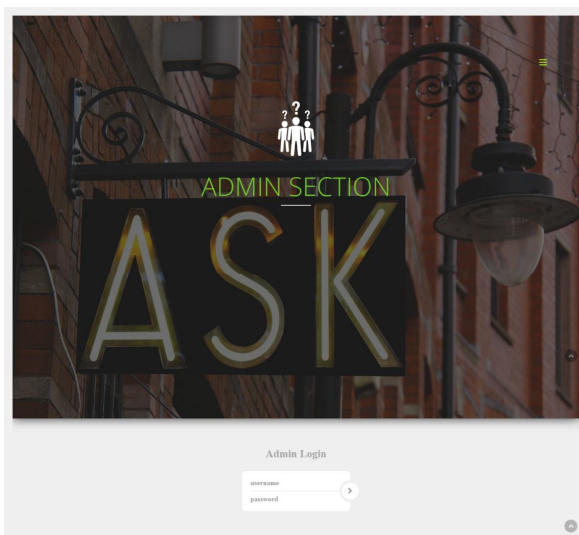


Fig2: Admin Login Module

About The Chat Module:

The main aim of Chat module is to provide a direct communication with a subscriber. This communication is the direct communication that is experienced by the receiver and the sender in a direct way and such kind of communicational processes help in decreasing the communication gaps, breaks and get instances feedback or reply. Here we provide a default list of rooms which is basically categories list. Any user (publisher or subscriber) can create a room if needed and another user (publisher or subscriber) can join to that chat room. Now the main advantage of using a chat feature in QA forum is user (publisher) can communicate in own way or language and get the proper response. Another advantage is user can share personal details in a chat room if he /she want. There is no admin approval needed. Any user can join or leave the room.

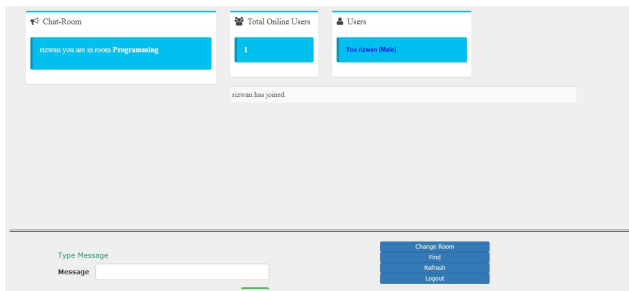


Fig6: Chat application Service Module

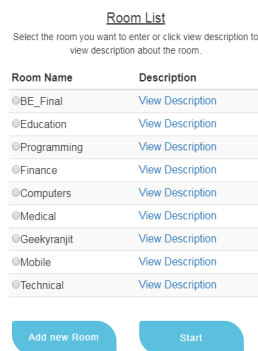


Fig7: Chat Room Service Module

IV. REVIEW OF LITERATURE

Existing System

Question answering is one of the major components of such personal assistants. Existing techniques already allow users to get direct answers to their factoid questions. However, there is still a large number of more complex questions, such as advice or accepted general opinions, for which users have to dig into the “10 blue links” and extract or synthesize answers from information buried within the retrieved documents.

V. CONCLUSION

In this paper, we intend to provide a new QA system which will be designed using Java J2EE. This system will be a crowdsourcing platform that will allow the user to submit a question where crowd worker will answer that question as per their level of knowledge. The system will also be integrated with admin functionality which will act as a site administrator, who will monitor all the posted questions. Once a question is posted by the publisher, the admin will get a notification and after admin approval, the question is available for the subscriber to answer that question. In this system, the publisher can also be a subscriber and a subscriber can also be a publisher.

VI. ACKNOWLEDGMENT

First, I would like to thank my guide Prof.M.S Khatib and Prof.Naisha Taban, because of their guidance we are able to do our project successfully during the entire course.

I would also thank to honourable Prof, Dr.Sajid Anwar, principal, A.C.E.T Nagpur.

Finally, I would like to thanks to all those who have contributed, directly or indirectly to make this project unsuccessful.

REFERENCES

- [1] A. Shtok, G. Dror, Y. Maarek, and I. pektor, “Learning from thePast: Answering New Questions with Past Answers,” in Proceedings of the 21st international conference on World WideWeb - WWW '12, 2012, p. 759.
- [2] K. Kim, S. Lee, J. Son, and M. Cha, “Finding informative Q&As ontwitter,” in Proceedings of the 23rd International Conference onWorld Wide Web - WWW '14 Companion, 2014, pp. 319–320.
- [3] L. B. Chilton, G. Little, D. Edge, D. S. Weld, and J. A. Landay, “Cascade: Crowdsourcing Taxonomy Creation,” in Proceedings ofthe SIGCHI Conference on Human Factors in Computing Systems -CHI '13, 2013, p. 1999.
- [4] G. Xintong, W. Hongzhi, Y. Song, and G. Hong, “Brief survey ofcrowdsourcing for data mining,” Expert Syst. Appl., vol. 41, no. 17,pp. 7987–7994, Dec. 2014.
- [5] J. Hentschel and J. Pal, “Sada Vehra: a framework for crowdsourcing Punjabi language content,” in Proceedings of the Seventh International Conference on Information and Communication Technologies and Development - ICTD '15, 2015,pp. 1–4.
- [6] S.-K. Choi, J.-H. Shin, and Y.-G. Kim, “Semi-automatic Filtering of Translation Errors in Triangle Corpus.”
- [7] L. Mitchell, S. O'Brien, and J. Roturier, “Quality evaluation incommunity post-editing,” Mach. Transl., vol. 28, no. 3–4, pp. 237–262, Dec. 2014.
- [8] O. Alonso, D. E. Rose, and B. Stewart, “Crowdsourcing forrelevance evaluation,” ACM SIGIR Forum, vol. 42, no. 2, p. 9, Nov. 192.
- [9] M.-C. Yuen, I. King, and K.-S. Leung, “A Survey of CrowdsourcingSystems,” in 2011 IEEE Third Int'l Conference on Privacy, Security, Risk and Trust and 2011 IEEE Third Int'l Conference on Social Computing, 2011, pp. 766–773.

- [10] D. Geiger and M. Schader, "Personalized task recommendation in crowdsourcing information systems — Current state of the art," *Decis. Support Syst.*, vol. 65, pp. 3–16, Sep. 2014.
- [11] A. Kittur, B. Smus, S. Khamkar, and R. E. Kraut, "CrowdForge: Crowdsourcing Complex Work," in *Proceedings of the 24th annual ACM symposium on User interface software and technology - UIST '11*, 2011, p. 43.
- [12] D. Notkin, B. H. C. Cheng, K. Pohl, M. IEEE Computer Society., and Institute of Electrical and Electronics Engineers., "Pricing crowdsourcing-based software development tasks," in *Proceedings of the 2013 International Conference on Software Engineering, 2013*, pp. 1205–1208.
- [13] J.-W. Jeong, M. R. Morris, J. Teevan, and D. Liebling, "A Crowd-Powered Socially Embedded Search Engine," in *International AAAI Conference on Web and Social Media; Seventh International AAAI Conference on Weblogs and Social Media, 2013*.
- [14] "Personalized task recommendation in crowdsourcing information systems — Current state of the art."
- [15] K. Mao, Y. Yang, Q. Wang, Y. Jia, and M. Harman, "Developer Recommendation for Crowdsourced Software Development Tasks," in *2015 IEEE Symposium on Service-Oriented System Engineering, 2015*, pp. 347–356.
- [16] M. Allahbakhsh, B. Benatallah, A. Ignjatovic, H. R. Motahari-Nezhad, E. Bertino, and S. Dustdar, "Quality Control in Crowdsourcing Systems: Issues and Directions," *IEEE Internet Comput.*, vol. 17, no. 2, pp. 76–81, Mar. 2013.
- [17] B. Li, X. Si, M. R. Lyu, I. King, and E. Y. Chang, "Question identification on twitter," in *Proceedings of the 20th ACM international conference on Information and knowledge management - CIKM '11*, 2011, p. 2477.