

Professional Employee Query Platform

*P. Dastagiraiah, Dr. S. Chokkalingam

**UG Scholar, Saveetha School of Engineering, Saveetha Institute of Medical and Technical Sciences, Chennai.*

Professor & HoD, Saveetha School of Engineering, Saveetha Institute of Medical and Technical Sciences, Chennai.

pdastagiraiah@gmail.com, chokkalingam@saveetha.com

Article Info

Volume 81

Page Number: 5533 - 5537

Publication Issue:

November-December 2019

Abstract

Usually Programmers and Professors solve their technical problems and resolve programming issues by posting them in internet such as “stack overflow”, “Quora” and etc. But a professional software engineer or developer who works for or under a private project can’t discuss their programming issues and main core issues which are related to their current working project which are highly confidential. Every good reputed company may have their own private network to communicate the technical problems or programming issues. What about average, below average scale industries, they can’t afford money to maintain virtual private network, here our platform comes into the picture and provides the good environment, platform for professionals to communicate and discuss their technical problems within their industry people with good security. It features questions and answers on local company projects in computer programming. The main goal of this project is to provide a more open alternative to earlier question and answer in platform such as technical issues and programming issues. The serves as a platform for employees to ask and answer questions, and, through membership and active participation, to vote questions and answers up or down and edit questions and answers in a fashion similar to a wiki or Reddit. Users of this project can earn reputation points and “rewards”.

Article History

Article Received: 5 March 2019

Revised: 18 May 2019

Accepted: 24 September 2019

Publication: 26 December 2019

Keywords: Question & Answer platform(Q&A website), Knowledge sharing(in terms of programming within organization), Security(for their data)

1. Introduction

Programmers and students comprehend their specialized issues and resolve programming issues by posting them in web like “stack overflow”, “Quora” and so on anyway proficient coder or engineer who works for on

underneath an individual task can't talk about their programming issues and principle center issues that are related with their current working undertaking which are very private. Each shrewd guessed organization have their very own system to talk the specialized issues or

programming issues. What in regards to average, beneath normal scale ventures, they can't bear the cost of money to keep up virtual individual system, here our foundation comes into the picture and gives the incredible air, stage for gifted to talk their specialized issues within their business with keen security.

Here user or employee will go to platform for making some queries. It highlights questions and replies on a wide scope of themes in programming. Its point is to be an increasingly open option in contrast to prior question and answer destinations, for example, technical issues and programming issues. The site fills in as a stage for representatives to ask and answer inquiries, and, through enrollment and dynamic investment, to cast a ballot questions and replies up or down and alter questions and replies in a manner like a wiki or Reddit. Users of this undertaking can win notoriety focuses and "remunerates".

2. Existing system

The best existing framework is stack overflow.

Stack Overflow is a question and answer site for expert and fan software engineers. It is a privately held site, the leader site of the Stack Exchange Network, made in 2008 by Jeff Atwood and Joel Spolsky. It highlights questions and replies on a wide scope of points in PC programming. It was made to be an open option in contrast to prior question and answer locales, for example, Experts-Exchange. The name for the site was picked by casting a ballot in April 2008 by readers of Coding Horror, Atwood's well known programming blog.

Stack Overflow is written in C# utilizing the ASP.NET MVC (Model-View-Controller) system, and Microsoft SQL Server for the database and the Dapper object-relational mapper used for data access. Unregistered users

have access to most of the site's functionality, while users who sign in can gain access to more functionality, such as asking or answering a question, establishing a profile and being able to earn reputation to allow functionality like editing questions and answers without peer review or voting to close a question.

3. Literature Survey and Understanding From the References

[1] **Stack Overflow: A Code Laundering Platform**, Ons Mlouki [1], Foutse Khomh [2], and Giuliano Antoniol [3]

The paper presents a discussion on Stack overflow website as mentioned below. Engineers use Question and Answer (Q&A) sites to trade information and mastery. Stack Overflow is a mainstream Q&A site where engineers examine coding issues and offer code models. Albeit all Stack Overflow presents are free on get to, code models on Stack Overflow are administered by the Creative Commons Attribute-Share Alike 3.0 Unported permit that designers ought to obey when reusing code from Stack Overflow or presenting code on Stack Overflow. And the site view the person who answered and which answer is verified and which isn't verified in the discussions.

[2] **Discovering Value from Community Activity on Focused Question Answering Sites: A Case Study of Stack Overflow**, Ashton Anderson [1], Daniel Huttenlocher [2], Jon Kleinberg [3], Jure Leskovec [4].

Here the synopsis states about the question and answering system and its significance as mentioned below. Question answer (Q&A) sites are currently enormous stores of important information. While most Q&A locales were at first planned for giving helpful responses to the inquiry asker, there has been a checked move towards question replying as a network driven

information creation process whose finished result can be of suffering an incentive to a wide crowd. As a feature of this move, explicit ability and profound information regarding the current matter have gotten progressively significant, and numerous Q&A locales utilize casting a ballot and notoriety instruments as highlights of their structure to assist clients with recognizing the dependability and precision of the substance.

4. Proposed System

Here user or employee will go to platform for making some queries. It highlights questions and replies on a wide scope of themes in programming. It point is to be an increasingly open option in contrast to prior question and answer destinations, for example, technical issues and programming issues. This site provides the all discussions occurred over a particular problem to the all user as already users are employees of particular organization. Not only the discussions but also the solutions they provided for the problem. Users of this undertaking can have points and remunerates. Here this will be done within organization and can be handled by the organization. Only employees of a particular organization can be

accessed the particular company stream, queries and discussions.

Here the main problem is to provide security and maintain data in a secure way that may need some encryption techniques and to maintain that encrypted and non-encrypted data we may require big data. Using this project employees of IT industry will discuss about all the things that involved in their official company projects. So there might be chance to occur some cyber attacks on it for their sensitive information and module codes which needs security to provide for them. These requires concepts in deep to implement completely sufficient and efficient platform with good security such as Machine learning, cyber security and its services, Big data & Processing and cloud based data management. So this is considered as future scope of project. And Scope of the project has been mentioned below.

5. Future Scope

The scope of the project is to automate the service without involvement of any manual work and physical presence. In future going to include the machine learning in project to automate the service and client activities while asking queries and replying to them.

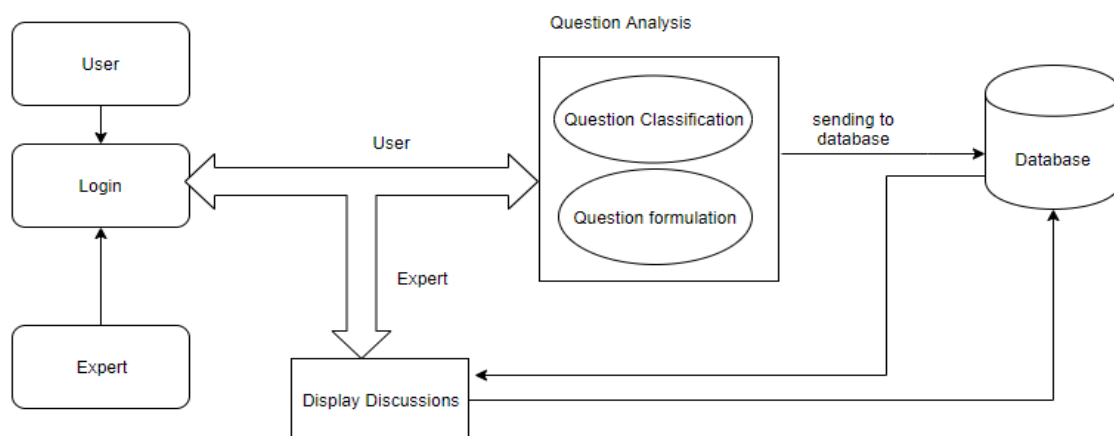


Figure 1: Proposed Architecture

The proposed architecture is having the different components and connections between them will give the overall idea about proposed system.

The components are

1. Login
2. User(Employees)
3. Experts(professionals)
4. Question Analysis
5. Database
6. Discussions

Generally every system has its own methodology but here there is no a formal methodology to build it. But there are some steps involved while development of project

- UI Development
- Functionality
- Database Connectivity
- Input data

Input data

Here it needed the Quantitative methods like surveys are best for measuring, ranking for giving data. Data may be a company employees mails and their details for registration of company under this website.

The following sections expound the details of the proposed system

A. Login and Authentication

Users or employees can access the website through sign-in page. User has to sign in with g-mail id which is registered under the company he/she is currently working. If not user can not access the discussions.

B. User and expert

After login into it either expert or user, discussions will be shown. Here the users mean the employee who is going to put query or question and expert is also an employee of the company but the person who answer the queries is considered as expert.

C. Question Analysis

This is mainly for the analysis and classification of an employee query and to store the data in a good structure for fetching it from database easily whenever it requires. There will be two parts one is question classification and question formulation.

D. Database

Here the database going to use is cloud database and if firebase. The Firebase Real time Database is a cloud-facilitated database. Information is put away as JSON and synchronized in real time to each associated customer. At the point when you assemble cross-stage applications with our iOS, Android, and JavaScript SDKs, the entirety of your customers share one Real time Database case and naturally get refreshes with the most up to date information.

Firebase applications stay responsive in any event, when disconnected on the grounds (offline) that the Firebase Realtime Database SDK perseveres your information to circle. When availability is restored, the customer gadget gets any progressions it missed, synchronizing it with the present server state

6. Results and Discussions

Here all discussions will be displayed for the users. There will be many features like viewing all the employees and giving tags to the other employees. It highlights questions and replies on a wide scope of themes in programming. It point is to be an increasingly open option in contrast to prior question and answer destinations. So everyone can see answers, provide answers and asks questions. Fig.2 shows the experimental results represented as graph to show the efficiency of the proposed system.

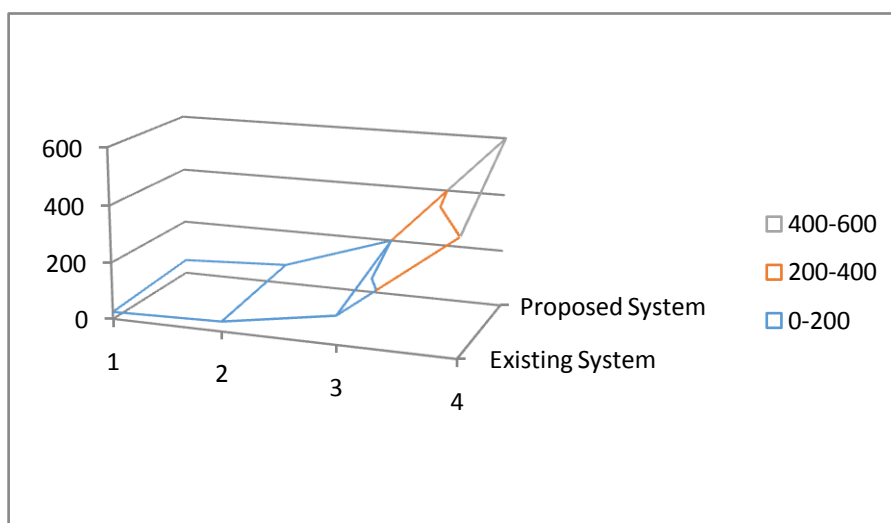


Figure 2: Comparison Graph

7. Conclusion

The main problem in present IT industry can be resolved and this project can be a solution for that. This can conclude that the automation will be the great change in the future industry. If this is included or supported with machine learning then using this, employee area of difficulty can be identified and accuracy will be increased when there is no difficulty in development of software product such as performance and quality.

References

- [1] Stack Overflow: A Code Laundering Platform, Ons Mlouki, Foutse Khomh, and Giuliano Antoniol
- [2] Discovering Value from Community Activity on Focused Question Answering Sites: A Case Study of Stack Overflow, Ashton Anderson, Daniel Huttenlocher, Jon Kleinberg, Jure Leskovec.
- [3] S. Fortunato, A. Flammini, F. Menczer, A. Vespignani. Topical interests and the mitigation of search engine bias. *Proc. Natl. Acad. Sci. USA*, 103(34):12684--12689, 2006.
- [4] J. Leskovec, D. Huttenlocher, J. Kleinberg. Governance in social media: A case study of the Wikipedia promotion process. *ICWSM*, 2010.
- [5] J. Preece, B. Nonnecke, D. Andrews. The top five reasons for lurking: Improving community experiences for everyone. *Computers in Human Behavior*, 20(2004).
- [6] J. Ratkiewicz, S. Fortunato, A. Flammini, F. Menczer, A. Vespignani. Characterizing and modeling the dynamics of online popularity. *Phys. Rev. Lett.*, 105(2010).
- [7] F. Wu and B. A. Huberman. Novelty and collective attention. *Proc. Natl. Acad. Sci.*, 104(45):17599--17601, Nov. 2007.
- [8] B. Vasilescu, V. Filkov, A. Serebrenik, "Stack overflow and github: Associations between software development and crowd sourced knowledge", *Proceedings of the International Conference on Social Computing (SocialCom)*, pp. 188-195, 2013.
- [9] C. K. Roy, J. R. Cordy, R. Koschke, "Comparison and evaluation of code clone detection techniques and tools: A qualitative approach", *Science of Computer Programming*, vol. 74, no. 7, pp. 470-495, 2009.