



Endorseme - Professional Networking Using Django

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Abstract— *Innovations are necessary to ride the inevitable tide of change. Over the past decade, the World Wide Web (WWW) has become an important day-to-day resource for the people. The Web has been transformed from a collection of static HTML pages to a complex, distributed computing platform, as evidenced by the success of sites such as LinkedIn and e-litmus. This transformation has been enabled primarily by web applications. Web application is most common used application all over the world in order to perform communication. Rapid growth of web application has increased the researcher's interests in this area. Professional networking sites have gained much popularity in the recent years, because of the opportunities they provide the people to connect with each other in an easy and timely manner, and to exchange and share various kinds of information. However, these sites are based on a centralized paradigm, which limits the mobility of their users, and ultimately, their chances for establishing new relationships and benefiting from diverse networking services. We argue for a decentralized paradigm for professional networking, in which users retain control of their profiles, and professional networking sites focus on the delivery of innovative and competitive services. Our position is that only in this environment will both the professional networking sites and their users be able to develop to their full potential.*

Keywords— *Web Intelligence, Web Applications, Big Data, etc.*

I. INTRODUCTION

In this e-era where everything is online whether it be education or shopping or making friends. In such an era education and experience sharing and also improvement of an individual in a career-oriented perspective can be achieved using online web applications. A place where people of similar interests can collaborate and share thoughts and their mutual experiences and ideas which can even make a naïve person think in a professional attitude.

Professional networking can make that happen. This will be an online service which anyone can sign-up for and use as and when required for as long as anyone wants. For this the machines should be smart enough to learn about the behaviour of all its users. The information on their traits and characteristics will be helpful for both the parties communicating.

Professional networking sites have gained much popularity in the recent years, to exchange and share various kinds of information. However, these sites are based on a centralized paradigm, which limits the mobility of their users, and ultimately, their chances for establishing new relationships and benefiting from diverse networking services. We argue for a decentralized paradigm for professional networking in which users retain control of their profiles, and professional networking sites focus on the delivery of innovative and competitive services.

Data mining is the process of extracting the implicit, previously unknown and potentially useful information from data. We will use knowledge extraction i.e. extracting knowledge from the data that user sends out during his activity. FP growth is an advanced version of Apriori Algorithm which uses frequent item sets to find out the confidence of some transaction that might occur given enough number of transactions. It says that if a particular super transaction is frequent enough then it is quite probable that the sub-transactions will also be frequent enough. This ideology can be extended that if most of the people in the professional circle are obsessed about one single thing, then it is probable that the target user might also like the same thing. It could both be possible because the person is either influenced by the group or they are friends because of this common interest they share. Also Django helps us develop powerful servers and python provides special libraries that could possibly make MongoDB database usage easier and more efficient. Python also provides special packages which will help us implement some more machine learning algorithms easily.

Machine learning is a technique in which the system is given the labelled data as the training set, which will be used as corpus to design a logic that will help find the answer to the unknown data which but follow the same pattern.

II. SYSTEM ARCHITECTURE

The architecture is divided into three logical groups:

1. The User Section
2. The Django engine
3. The MongoDB database

1. The User section:

The user interacts with this section. The input is taken and the output is given from the user section. This makes the user section the "face" of my-e-profile.

2. The Django engine:

This is the backbone of the project. This actually take input from the user converts it into some valid query and then fires it onto the database. It also takes input from the database after the query is fired and renders the result onto the screen.

3. The MongoDB database:

It is the NoSQL database used to store the Big Data (non -relational) uploaded by users or generated by their activity.

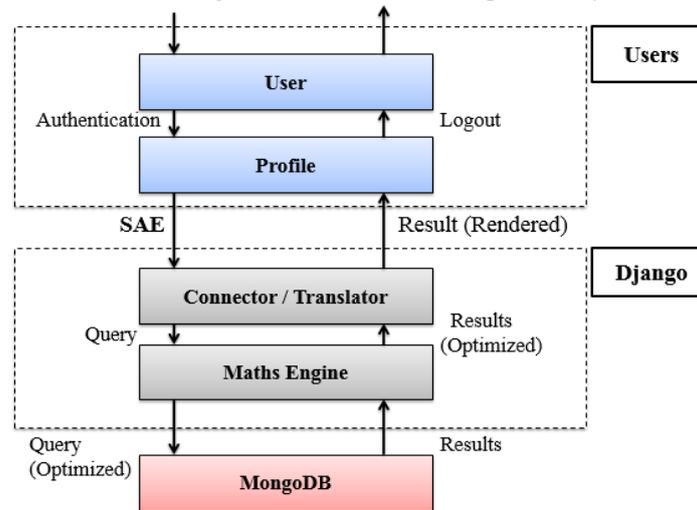


Fig. 1 System architecture

The Flow:

1. The user authenticates into his account by using traditional Username-Password authentication technique.
2. User then interacts with his profile which is a part of my-e-profile User module.
3. The user can do three things:
 - I. (S)earch for education or job opportunities.
 - II. (A)ccess the required contents
 - III. (E)ndorse his abilities
4. These three SAE activities once chosen and asked by the user and then forwarded to the "Connector/Translator".
5. The "Connector/Translator" is part of Django-nonrel which converts the given input into equivalent query.
6. This query is then forwarded to the "Maths Engine".
7. "Maths Engine" then optimizes the query based on previous user input in order to get more relevant results from the database.
8. So, "Maths Engine" does something called as "query optimization".
9. Now these "optimized" queries are fired onto our database.
10. The database then returns results to the "Maths Engine".
11. "Maths Engine" filters these results and takes only what is necessary.
12. These results are then forwarded to the "Connector/Translator" which in return renders the result onto the screen, which our users see as the output.

III. ADVANTAGES AND APPLICATIONS

Advantages:

1. Faster and Easier access to the content
2. More Relevant content only by filtering out noise.
3. Powerful and Secure connections during communication
4. Data Security and Safety
5. User Privacy by using access permissions
6. Improvisation by user experience

Applications:

1. Efficient Searches in all Context
2. Quicker Retrieval of data in Database
3. Widely usable in social and professional networking
4. Gauging the professional needs of individual

IV. FUTURE SCOPE

1. A Progressive Web app or an android app for easy access to the content
2. Internships and job Suggestions by the performance view
3. Career counselling based on the study data acquired

4. Better performance for offline usage
5. Head-on-Head competition features to spawn activity
6. Video Tutorials and courses
7. Personal Performance Graph
8. Inter-connectivity with relevant people
9. Forum for doubts and Discussions
10. Updated feeds on recent updates

V. CONCLUSIONS

We have presented a system which allows user to Search and Access contents relevant to his knowledge and/or interests. Several other features such as able to connect with relevant people in order to gain experience and knowledge will help create an environment conducive to development of the individual and improvement in the performance. We use various pattern mining and clustering algorithm to make results more relevant to the user. This makes the use of site very easy and hackle free. The results are well optimized to preserve the best interests of the user.

REFERENCES

- [1] Blank, R. K., delas Alas, N., & Smith, C. (2007). Analysis of the quality of professional development programs for Findings from a cross state study. Washington DC: CCSSO.
- [2] Corcoran, T., McVay, S., & Riordan, K. (2003). Getting it right: The MISE approach to professional development. Philadelphia, PA: Consortium for Policy Research in Education.
- [3] Garet, M. S., Birman, B. F., Porter, A. C., Desimone, L. & Herman, J. (1999). Designing effective professional development: Lessons from the Eisenhower program [and] technical appendices. U.S.: District of Columbia.
- [4] Stein, M. K., Smith, M. S., & Silver, E. A. (1999). The development of professional developers: Learning to assist teachers in new settings in new ways. Harvard Educational Review 69(3), 237-269.