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An Efficient Way of Friend Recommendation Using Secure Social Networking

Priyanka S. Helode¹, Prof.K.H.Walse², Prof. M.U. Karande³

M.E. Student, Dept. of Computer Engineering, Padm. Dr. V. B. Kolte College of Engineering and Technology,
Malkapur (M.S.), India¹

Professor, Dept. of Computer Science and Engineering, Anuradha Engineering College, Chikhali (M.S.), India²

Assistant Professor, Dept. of Computer Science and Engineering, Padm.Dr. V B Kolte College of Engineering and
Technology, Malkapur (M.S.), India³

ABSTRACT: Now a day's folks individual's unit inattentive with their busy schedule life so as that they do not have any time to spare for themselves. However, they have to revive to a platform like social networking for staying connected with their dear ones. Social networking is that the only and convenient technique for interacting with the people around the whole world with the help of social networking services, people can communicate move with the others administrative unit removed from them. This paper proposes, Friend discovery system could also be a social networking service to help people builds new friends. For alternative of friends, thus inside the given we tend to propose friend suggestion system that is supported on Associate in user's profile, user's life-style, ratings and comments given by friends and in addition contains user's nature and behaviour we tend to tend to in addition implement a security in social network.

KEYWORDS: Social networks, Security, Friend recommendation, life style, ratings.

I. INTRODUCTION

In this paper few years past, typically created friends with different world organization agency live or work on. Friendship may be a crucial a district of ahuman's life. Making friends can be very straightforward but making friends with our interests can be exhausting task. Many men have lots of friends and have their own set of interest. They're differing from person to person. Many social networks provide friends suggestion system for making friends. The friend suggestion provided by supporting their users in varied selection making processes, like geographical location where unit of measurement lives, as interest what music to be listen or what news to browse.Friend suggestion system ought to be valuable suggests that for the online users to represent with the information overburden and have come back to a minimum of one among the foremost durable and accepted device in processing. Example-Face book, twitter. throughout this recommendation system there unit of measurement two major types: cooperative filtering based mostly} mostly} recommendation and content based recommendations. The foremost very important consider friend book recommendation system to identify or guess the user different and analyzing the user interest on his/her behaviour to urge the personal friend recommendations. part of them trust pre-existing user relationships to pick out friend candidates as an example, Face book depends on a social link analysis among those who already share mutual friends and suggests similar users as potential friends. Sadly, this approach may not be the foremost acceptable supported recent science findings.As per these studies, the principles to cluster people on include: 1) habits or lifestyle; 2) attitudes; 3) tastes;4) moral standards;5) economic level; and 6) people they already perceive. Apparently, rule #3 and rule #6 square measure the thought factors thought of by existing recommendation systems. Rule #1, altogether likelihood the foremost intuitive, is not widely used as a results of users' life styles square measure powerful, if

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unfeasible, to obtain through internet actions. Rather, life styles square measure usually closely connected with day to day routines Therefore, if it would collect data on users' day to day routines and activities, it'll exploit rule #1 and counsel friends to foegys supported their parallel life styles. This suggestion mechanism is usually proposed as a standalone application on good phones or as associate add-on to existing social network frameworks. In every case, Friend book can facilitate moveable users notice friends either among unknown persons or among a selected cluster as long as they share similar life styles. [2] The evolution of the net from internet one.0 to web 2.0 has discovered new platforms as Social Network Sites that square measure utilized by users to understand and take care of their relationships. Social Network Sites square measure an online development that has become very widespread. they provide social network based services to support straightforward message posting, data sharing and inter-friend communication.

Social Network Sites square measure made public as web-based services that modify individuals to- (1) create a public profile at intervals a delimited system, (2) articulate an summery of other users with whom they share a association, and (3) search and traverse their list of connections and other people created by others at time of the system [2]. Relationships data obtained from a person's social network contacts can therefore be thought of together reasonably a person's social context, that existing literature refers to as 'who you are with' or one's 'social situation', 'identity', and 'social relations' or even 'who you are similar to'. Thus, data regarding relationships from social network thought of together reasonably a person's social context. [1]

The social recommender systems conclude the affectivity of things, people, or teams supported the multifaceted social environment of a given user. supported this model, it introduces friend suggestion system for content sharing frameworks this technique take into consideration a specialised model of dependencies between users, items, and observations that has a decent acceptable discovered properties of the folksonomy. [7]

Hence here, in our approach we've got an inclination to square measure making use of user life vogue as major concern for suggesting friends and develop relationship among of us the parents the oldsters} with parallel interest and facilitate to contribute information or develop communication among probably inclined folks. With the help of Graph API, which is provided by Face Book developers we've got an inclination to abstract user interest that tends to induce body of user. The texts might in addition embody information like topic of user's interests, user's activities, occupation, etc. the information relating to the user interest and his/her occupation are accustomed consider friends.[5] Friend recommendation could also be a widespread and necessary service in on-line social networks. This system recommend probable friends, therefore people can extend their networks. Friend suggestion system can handle topological structures of a social networking. Throughout this approach, recommendation is alone supported but people square measure presently connected and whether or not friends of existing friends of a personal are new friends of the person. Recommendation might embody non-topological information. As an example, one technique is to use a user's profile, like education and skilled background, to create recommendation. Whereas this technique will enhance recommendation performance of system, it largely target on static information of user, and view changing interests of user.[4]

II. RELATED WORK

In this area, initially define the notations utilized in this paper, analyse some safe primitives used in our Online Secure Social Networking.

1. Friend Recommendation Method using Physical and Social Context

As per this paper, it proposed a lover suggestion methodology the physical and social context. The theme considers friendship from identical physical context. Moreover, our theme considers categorical friendship social context just like the social network. And then, theme joined every the friendship victimization physical context and also its social context.

Advantages: In this paper the friend suggestion using the physical and social context.

Limitation: In this paper did not consider that much physical and social context for friend suggestion.

2. Friend book: A Semantic-based Friend Recommendation System for Social Networks

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Vol. 6, Issue 10, October 2017

In this given paper, we've a gift Friend book, a very distinctive semantic-based friend suggestion system for social networks, that recommends friends to users supported their life styles instead of social graphs. By using of sensor-rich Smartphone, Friend book invents life sorts of users from user-centric detector information, calculate the identical life styles between users, and suggests friends to users if their life styles are highly matching. With the help of text mining, it have a bent to design a user's presence as life documents; from that his/her life styles unit derived by pattern the LDA algorithmic rule. It have a bent to extra implement a similarity metric to measure the similarity of life styles between given users, and estimate users' impact in terms of life styles with a friend-matching graph. Upon gettinga concern participation, Friend book returns a list of people with highest recommendation scores to the question user.

Advantages: In this paper the recommendations accurately display the preferences of users in choosing friends using location.

Limitation: In this paper social link analysis among people who already share mutual friends and suggests proportional users as potential friends. This advance might not be the foremost acceptable supported recent social science findings.

3. Latent Dirichlet Allocation

In this paper we've an inclination to require into consideration the matter of modeling text corpora and various combination of distinct information. The aim is to hunt out small descriptions of the members of a group that amendment economical method of huge combination whereas protecting the necessary mathematics relationships that are useful for basic tasks like allocation, novelty detection, report, and similarity and connectedness judgments. important progress has been created on this given draw back by researchers among the sphere of data retrieval (IR) (Baeza-Yates and Ribeiro-Neto, 1999). the basic technique planned by IR researchers for text corpora—a technique successfully deployed in stylish internet search engines—reduces each report among the core to a vector of real numbers, each of that describe ratios of counts. among the a la mode tf-idf theme (Salton and McGill, 1983), a basic vocabulary of “words” or “terms” is chosen, and, for every document within the corpus, a count is made of the quantity of occurrences of every word. when appropriate Normalize Antonyms, this term frequency count is compared to associate degree opposite document frequency count, that measures the quantity of occurrences of a word within the entire corpus. The top result's a term-by-document matrix X whose columns contain the tf-idf values for every of the documents within the corpus. therefore the tf-idf theme reduces documents of impulsive length to fixed-length lists of numbers.

Advantages: In this paper this system provides flexible constructive probabilistic model for collections of different data.

Limitation: In this paper joint distribution is used for existing system that can be quite complex.

4. Interest based friends exploration and recommendation in social networks

In this given paper, ithavepropose a completely visual system, Social Friends Visualization, to guide users to analyse and understand friends interactively beneath a context of interest. This approach authority each structure of activity information and topological structures in social networking system. In Social Friend Visualization, a data structure of social tags is generated to help users navigate through a network of interest. Multiscale and crossscale collection of similarity among individuals square measure given within the hierarchy to support users to hunt friends. It have a type to report a case study victimization Social Friend Visualization to explore the suggested friends supported people's tagging behaviours in an exceedingly music community. The results indicate that system will improve users' awareness of their social networks beneath completely different interest situations, associated facilitate users obtain friends sharing similar interests in an collective means.

Advantages: In this paper: dynamically suggesting friends by considering both social combination and a context of social connections in a way of visual exploration is not well supported by existing tools

Limitation: In this paper the system propose a novel progress to support users to analyze and find friends with discrete interests.

5. A Friend Recommender System for Social Network by Life Style Extraction Using Probabilistic Method - “Friend tome”

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In this paper, a social network is formally diagrammatic and taking text mining as a perspective & proposes a framework which is able to support friend associate economical algorithmic program. It analysed the structure of Facebook and considering the activities of individuals got some values & calculate the score of each individual supported, analysed and computed to suggests the proportion of similarity of life styles between users, and recommends friends to users if their life styles have high similarity

Advantages: In this paper Graph API is the skill to learn highly authentic extraction rules, and then store this user information like 'name', 'email', likes, in the database.

Limitation: In this paper, Friendbook has recommended a friend which is based on common friend of friends that help to use of a friend way found to be not that significant.

III. EXISTING SYSTEM

In existing system, square measure performing on location based mostly looking friend it gives the design & execution of Friend book, the linguistics primarily based friend suggestion system for social networking. with the exception of the friend suggestion mechanism, it rely on graphs structure of social in their social networking services, it derived their life vogue activities from user centric data which is received from sensors on the mobile and suggests friends to users if they assigned similar life styles. It rules to assemble people on include: sort of living; financial standing. Possibly, tastes and people unit the foremost factors designed by existing suggestion systems. Life type of users, is not typically used as a results of user's life styles unit problematic, if not relevant, to capture through internet actions. Relatively, life styles activities unit closely connected with day to day activities. Therefore, if it may collect info on user's day to day activities, it'll think about life-style of users and counsel friends to a unique user rely upon their same type of living. The given existing friend suggestion mechanism settle for pre-existing user relationships to pick friend criteria. as an example, social application facebook rely upon a social link analysis among folks that have already got common friends and suggests similar users as friends.

IV. SYSTEM ARCHITECTURE

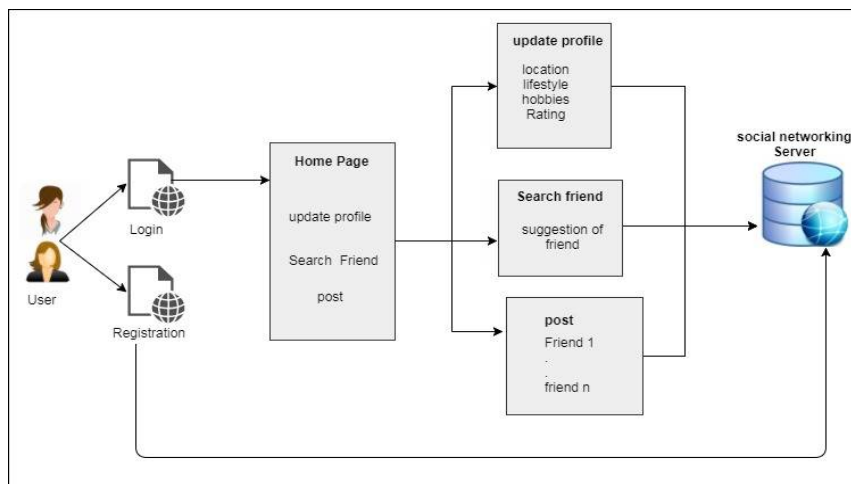


Fig 1: System Architecture

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V. PROPOSED WORK

In propose work, we have a tendency to victimization multiple attribute for recommendation victimization profile matching. We have a tendency to are security for causation post to explicit friend in an exceedingly cluster. Solely life vogue won't play huge role in friend discovery, this paper propose varied techniques for friend recommendation eg. Lifestyle, behaviour (nature), ratings, profile etc. In this paper new friend recommendation technique throughout that user will specify their day to day life vogue activities in predefined forms and Secure document storage AES secret writing rule. The propose system is to boot tailored by the foremost recent advances in good phones, that became preferred in people's life. a wise phone is not solely communication device, but to boot a strong game medium from that we tend to non-heritable made context and content-aware details. From this point of browse, good phones perform the most effective medium for sensing day to day activities from that people's reasonably living is also developed. Once receiving of invite, Friend discovery system gift a list of user with the most effective suggestion result to the question that's asked by user. Ultimately, Friend discoveries System implement a feedback system to boost the suggestion potency. The results of this technique show the suggestion accurately that follow the preferences of users in selecting friends.1) User are their registration that store in social networking knowledge base server.2) once registration, whenever user shall login in social networking website, user shall update their day to day Activity on social networking website.3) Social networking website can get the data of users e.g. manner of user and alternative activity approved out by day to day.4) Through Friend management system, user can do alternative activities like Perform social activities e.g. transfer docs, post comments, offer ratings to friends etc., Opinion mining of posts and comments, Keep Track of social activities and user behaviour and profile analysis.5) With help of pattern matching Algorithm, system will match the data of user with other users and the friends having same lifestyle.

VI. MATHEMATICAL MODEL

Let S is the whole system consists

$S = \{U, w, z, d, Q, F, L\}$

Where,

U -set of number of users

Q -set of query generated from user

F -set of feedback of users

w -set of activities

z -set of life styles

d -set of life documents

L -set of the life style vectors of user.

Process 1: social networking for recommending friends to the users on the basis of their likes and dislikes and their daily activities.

Process 2: In the system log in page is formed for user to log within the system and for brand spanking new users register page is out there thereon user ought to fill some basic data then confirmation of their account on the triple-crown creation mail are going to be sent to their various mail id.

Process 3: After that user are going to be redirected to the house screen on that varied choices area unit there user will sent friend request to different user and settle for the other way around. Additionally user will share media or some files or standing on the system et al. will like or dislike the shared things.

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VII. PRACTICAL RESULT AND ENVIRONMENT

In this paper, the performance of Friend book is evaluated on small-scale experiments.

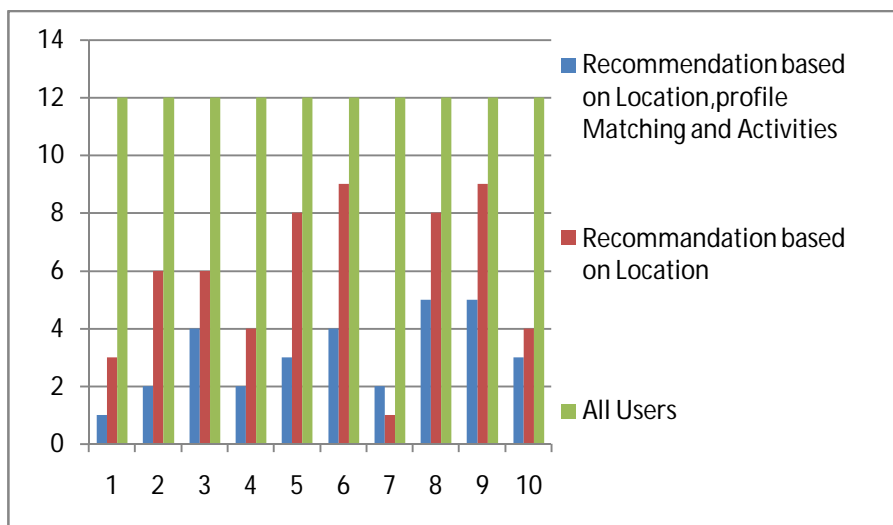


Fig.2: Recommendation graph

Chart result shows the output of system according to various levels of recommendation strategies implemented. This chart is for 12 users in system that has used recommendation. Chart shows output on all users.

VIII. CONCLUSION

In this paper, it is try to give the look and implementation of the friend discovery system that is beneficial in social networking for recommending friends to the users on the premise of their likes and dislikes and their daily activities .we have produce a social media application that cowl the disadvantages of existing system we have a tendency tore solely uses location for the advice of friend in propose system we have a tendency to are exploitation multiple attribute for recommendation exploitation profile matching we are exploitation security secret writing and decryption for causation post of specific friend in a very cluster. during this system log in page is formed for user to log within the system and for brand spanking new users sign on page is obtainable thereon user need to fill some basic info then confirmation of their account on the prosperous creation mail are sent to their several mail id. then user are redirected to the house screen on that varied choices area unit there user will sent friend request to different user and settle for the other way around. conjointly user will share media or some files or standing on the system et al. will like or dislike the shared things. As compared to the prevailing recommendation strategies, the projected methodology searches the buddies to satisfy a user's current contexts.

REFERENCES

- [1] J. Kwon and S. Kim, "Friend recommendation method using physical and social context", International Journal of Computer Science and Network Security, 10(11):116-120, 2010.
- [2] Zhibo Wang, Jilong Liao, Qing Cao, Hairong Qi and Zhi Wang, "Friendbook: A Semantic-based Friend Recommendation System for Social Networks", IEEE Transaction on mobile computing.
- [3] B. Bahmani, A. Chowdhury, and A. Goel, "Fast incremental and personalized pagerank", Proc. VLDB Endowment, vol. 4, pp. 173-184, 2010.
- [4] David M. Blei, Michael I. Jordan, "Latent Dirichlet Allocation", Journal of Machine Learning Research 3 (2003) 993-1022.

International Journal of Innovative Research in Science, Engineering and Technology

(A High Impact Factor, Monthly, Peer Reviewed Journal)

Visit: www.ijirset.com

Vol. 6, Issue 10, October 2017

- [5] K. Farrahi and D. Gatica Perez, "Discovering routines from largescale human locations using probabilistic topic models", ACMTrans Intel. Syst. Technol., vol. 2, no. 1, pp. 3:1–3:27, 2011.
- [6] L. Gou, F. You, J. Guo, L. Wu, and X. L. Zhang, "Sfviz: Interestbased friends exploration andrecommendation in social networks", in Proc. Visual Inform. Commun.-Int. Symp.2011, p. 15.
- [7] Namrata M.Eklaspur , Anand S.Pashupatimath, "A Friend Recommender System for SocialNetworks by Life Style Extraction Using Probabilistic Method - Friendtome", International Journalof Computer Science Trends and Technology (IJCSST) – Volume 3 Issue 3, May-June 2015
- [8] Sachin V Josef, MinuLalitha Madhavu2, " Incremental iterative time spent based ranking model foronline activity based friend-group recommendation systems," 6th ICCCNT – 2015 July ,13 - 15, Denton, U.S.A..
- [9] Wenpu Xing and Ali Ghorbani, on "Weighted PageRank" University of New Brunswick, Fredericton,NB, E3B 5A3, Canada.
- [10] E. Miluzzo, N. D. Lane, S. B. Eisenman, and A. T. Campbell. "Cenceme-Injecting SensingPresence into Social Networking Applications" Proc. of EuroSSC, pages 1-28, October 2007.
- [11] Lu Yang, Anilkumar Kothalil Gopalakrishnan, "A Collaborative Filtering Recommendation Basedon User Profile and User Behavior in Online Social Networks" 2014 International Computer Scienceand Engineering Conference (ICSEC) 978-1- 4799-4963- 2/14/©2014 IEEE.
- [12] Yubin Wang, Tingwen Liu, "Identifying Users across Different Sites using Usernames",in Proc. ICCS ,Volume 80, 2016, Pages 376–385.
- [13] Qian, Feng, Zhao, and Mei, "Personalized recommendation combining user interest and socialcircle," IEEE Trans.Knowl. Data Eng., vol. 26, no. 7, pp. 1763–1777, Jul. 2014.
- [14] Perito, Castelluccia, Kaafar, and Manils, "How unique and traceable are usernames?" in Proc.11th Int. Conf. Privacy Enhancing Technol., 2011, pp.1–17.
- [15] Reza Zafarani, Lei Tang, and Huan Liu. 2015. "User identification across social media" ACM Trans.Knowl. Discov.Data 10, 2, Article 16 (October 2015), 30 pages.