

Privacy-Preserving Cooperative Tagging Service Using Parental Control

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Abstract— Collaborative tagging is one in every of the foremost widespread services accessible on-line, and it permits user to loosely classify either on-line or offline resources supported their feedback, expressed within the style of free-text labels (i.e., tags). though tags might not be in and of itself sensitive data, the wide use of cooperative tagging services will increase the danger of cross referencing, thereby seriously compromising user privacy. Here a primary contribution is created towards the event of a privacy-preserving cooperative tagging service, by showing however a selected privacy-enhancing technology, specifically tag suppression, will be wont to shield end-user privacy. Moreover, associate degree analysis is created to see however the approach will have an effect on the effectiveness of a policy-based cooperative tagging system that supports increased net access functionalities, like content filtering and discovery, supported preferences such by finish users.

Key words: Privacy Preserving, Tagging, Content Filtering

I. INTRODUCTION

The main aim of this project is to classify resources, defend user privacy whereas tagging Resources and looking out and to boost internet access functionalities like content filtering supported preferences specified by finish users The main purpose of cooperative tagging is to loosely classify resources supported end-user's feedback, expressed within the type of free-text labels (i.e., tags). though cooperative tagging is principally accustomed support tag-based resource discovery and browsing, it might even be exploited for different functions. As Associate in Nursing example, the tags collected by social book marking services is exploited to enforce increased internet access functionalities, like content filtering and discovery, supported preferences specified by the tip user. However, to attain this increased use, this design of cooperative tagging services should be extended by together with a policy layer. The aim of this layer are to enforce user preferences, by design denoting resources on the premise of the set of tags related to them, and, possibly, different parameters regarding their trait (the proportion of users United Nations agency have added a given tag, the social relationships and characteristics of these users, etc.).

The needs specification may be a technical specification of requirements for the package product. it's the primary step within the needs analysis method it lists the necessities of a selected software package as well as practical, performance and security needs. the necessities conjointly give usage eventualities from a user, Associate in Nursing operational Associate in Nursingd an body perspective. the aim of package needs specification is to supply a close summary of the package project, its parameters and goals. This describes the project target market and its programme, hardware and package needs. It

defines however the shopper, team and audience see the project and its practicality.

II. EXISTING SYSTEM

The collection of end-users' personal info hold on by social services, is currently recognized as a privacy threat it's value noting that the general public convenience of user-generated knowledge (as tags are) might be wont to extract AN correct shot of users' interests or user profiles, containing sensitive info, like health-related info, political preferences, pay or faith. Actually, the massive range of users victimization cooperative tagging services, and therefore the indisputable fact that cooperative tagging may be a service supported just about by any social on-line application, will increase the danger of cross referencing, thereby seriously compromising user privacy. Indeed, it might be potential to correlate the account of a user with alternative accounts he/she could have at completely different services, which might imply gaining way more precise info regarding the user profile.

III. PROPOSED SYSTEM

Proposed System protects user privacy to an explicit extent, by dropping those tags that build a user profile show bias toward bound classes of interest. Tag suppression could be a technique that has the aim of preventing privacy attackers from identification users' interests on the idea of the tags they specify. information perturbation technology permits a user to refrain from tagging bound resources in such a way that the profile doesn't capture their interests thus exactly. A additional intelligent variety of tag perturbation consists in commutation (specific) user tags with (general) tag classes.

Proposed system addresses 2 scenarios: resource recommendation and Parental management. In Resource recommendation, provides relevant resources supported user interest. Parental management considerations whenever a bunch user requests resource, cluster owner provide privilege to access resources.

IV. SYSTEM DESIGN

A. Add Group User

In this module, cluster owner must register their details. when triple-crown registration, details square measure keep in information. once the cluster owner login, he/she will read his/her profile. Here cluster owner will add users. cluster owner set username and word to all or any cluster users. mistreatment this username and word, user will read cluster owner's profile, bookmarks etc. cluster users register their details. At registration, cluster user must offer username and word given by cluster owner. cluster owner restricts users to look at solely mere contents.

B. Search and Bookmark

User will search resources in net consistent with their personal preferences. List of internet sites displayed wherever user will read his/her interested links. If the user likes the link, he/she will bookmark by giving tag for future tag search. whereas bookmarking, user will provide multiple tags. Username, tag name, link and different details are kept in information. Tags given by user are going to be classified and kept in information. User will provide access privileges to bookmarks. If the bookmarker is personal, solely the user will read. If the bookmarker is public, different users will read his/her bookmarks.

C. Tag Suppression and Tag Recommendation

User likes a link in net and bookmarks that link. User tags the bookmarker. whereas tagging, user will provide own tag or raise server to recommend tags. Server provides suppressed tags wherever user will opt for tag. during this manner, user protects their privacy whereas tagging. All the bookmarking data are kept in information. If the user searches a tag, he/she will search in their bookmarks or altogether bookmarks. If the link has multiple tags, user searched tag and different tags for that link are displayed. Recommending users for the past one week links and tags.

D. Parental Control

Group owner will add users for content filtration purpose. cluster owner alter an internet filter for cluster users by granting them access solely to contents nominative by cluster owner. cluster owner denote that resources is un/safe. By checking the accessible tag classes, cluster owner blocks the tags for users. cluster user will access the tags giving username and countersign. cluster user has restrictions solely in Tag Search. All the opposite services, cluster user will access. (Search and marker, Add bookmark)

V. SYSTEM ARCHITECTURE

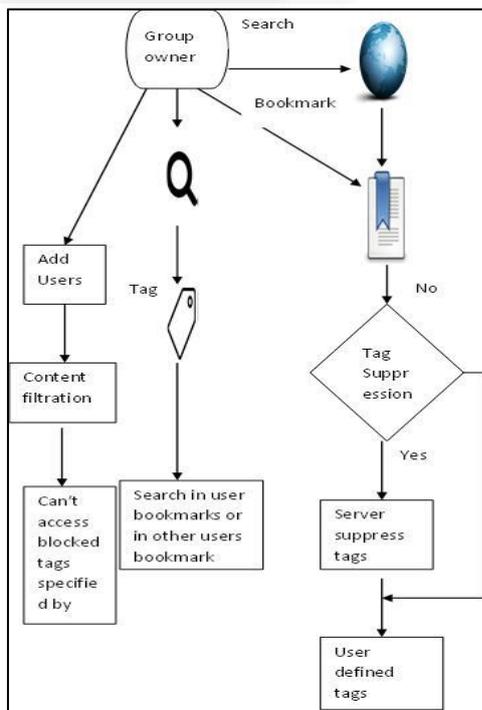


Fig. 2: System Architecture

VI. CONCLUSION

Collaborative tagging is presently and intensely well-liked on-line service. Although today it's essentially accustomed support resource search and browsing, its potential continues to be to be associate degree content filtering and discovery. For this to become a reality, however, it would be necessary to increase the architecture of current cooperative tagging services thus on embody a policy layer that upports the social control of user preference. On the opposite hand, a cooperative tagging has been gaining quality, it has become additional evident the necessity for privacy protection not solely as a result of tags are sensitive data per se, but additionally as a result of the chance of cross referencing. In a shell, cooperative tagging would additionally enjoy a layer serving to users shield their privacy. Motivated by all this, the first contribution is that the architecture that comes with 2 layers on support of increased and cooperative tagging. More specifically the planned architecture carries with it a bookmarking service and 2 extra services engineered thereon. The former service permits users to dam unwanted with content and to denote resources of interest.

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