i Title:

Xin Xia, David Lo, Xinyu Wang and, Ha Bo Zhus, Tag recomendation in Software Information Site Proceeding Published in MSR'13 Proceedings of the 10th Working Conference on Mining Software Repositories

ii Keywords

ii1 <u>TagCombine</u>: An automatic tag recommendation method which analyzes objects in software in-formation sites. Components of TagCombine being multi-label ranking component, similarity based ranking component, and tag-term based ranking component

ii2 <u>StackOverflow</u>: A popular Q&A site which focuses on technical questions about software development.

ii3 <u>Software Information sites</u>: Online media which help software engineers to improve their performance in software development, maintenance and test processes as software information sites

ii4 <u>Tag Synonyms</u>: Tag synonyms refer to tags which are syntactically different (i.e., they are different strings of symbols) but are semantically the same.

iii Brief Summaries

iii1 Motivation: Selecting appropriate tags for users in sites like Stackoverflow and Freecode is not an easy task if the users are not familiar with the site. So . in that case if there is a method that would recommend some tags according to the object a user posts and the previous tags of objects that other users have already posted, then the user could add the appropriate tags easier, and the tag synonyms problem can also be avoided. Thus, tagsynonyms, easier posting, and better organization and search is the major motivation for the idea of tagging posts so as making it easier for search and showing relevant data to users.

lii2 <u>Data</u>: The authors perform evaluations on 2 software information sites, StackOverflow and Freecode, which contain 47,668 and 39,231 text documents, respectively, and 437 and 243 tags, respectively.

iii3 Related Work:

Al-Kofahi et al. propose a tag recommendation system for software work item system such as IBM Jazz, which is based on fuzzy set theory. Zangerle et al. propose a tag recommendation system for Twitter short messages, which recommend tags according to the tags of similar short messages

iii4 Informative visualizations:

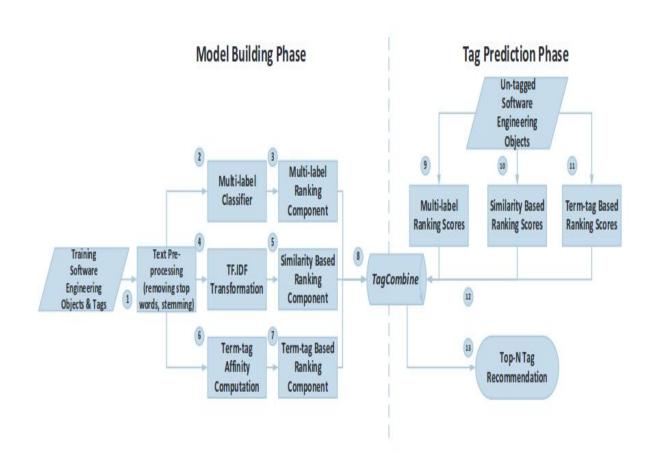


Fig. 4. Overall Framework of TagCombine

The above figure picked directly from the paper is the tagCombine software developed by the authors of the paper

iv Scope Of Improvement

lv1: Investigate more software in-formation sites to evaluate the effectiveness of the technique developed

iv2: Develop a better technique which could achieve a higher recall@5 and recall@10 scores, and consider more tags in tag space.

iv3: Experiment with different algorithms to replace the various components like the multilabel ranking component, similarity ranking component etc.