Web Search Engine course project:

Recommender Systems for events based online social networks

Jiang Yu

5/3/2015

jakejyu@gmail.com

**Summary:** Complete two elementary Recommender System engines. They could be used to provide basic recommending service such as recommending users for new events, and recommending events for users for events based online social network such as Meetup, Douban and etc.

**1, Project basically achieved proposal technical specifications:**

1. Recommending some local event activities to users in some specific group.
2. Recommending some potential interested users to some new events in some specific group.

**2, Specific output of the program:**

1. Return top k (specified by input parameter) users based on ranking algorithm to some events in the groups according to events description similarity.
2. Return top k event ranked recommendations for the all users in groups according to their events attendance history.

**4, Data that will be acquired or used:**

**Data source:** crawled from meetup website using their API. (Meetup Dataset, and/or Yelp Dataset)

**Format:** Jason files.

**Fields:** lots of information like group id, group name, group members, event time, event attended users, event id, event organizer, event description.

**Size of data:** about 2-3G (compressed in zip file) for the Meetup data.

**Where it will be stored:** local, laptop.

**5, User interaction (what will users be able to do, how will they interact):**

The user could put some RSVTs for some events, and afterward, they will get some recommendations about which events that they will probably like to attend in future.

**6, What is new in the program beyond what was done in the homework:**

First, some link analysis will be added in the project.

Second, some classification algorithms will be added.

Third, some new ranking algorithms will be added.

Fourth, hope to do both link information analysis and some text mining, and combine the results to achieve better performance.

**Limitations:**

1, Could to do more work, such as group recommendation, and more advanced ranking algorithm. But due to limited time, …

2, Could add web based frond end.