Final Project Report—Twitter Duke

Twitter Duke acts as a collaborative platform for categorizing anything users desire. Through consolidation of ratings and tags on user-submitted items, the application presents a sidebar displaying the most popular item tags, with the items within each grouping ranked by rating and tagging frequency. Each submission must include a photo, to further characterize each item for the user. In theory, this kind of social setting allows for anonymous, community recommendations and warnings about many subjects-of-interest related to student life. Courses, on-campus study spots, and food places are just some of the potential items that Twitter Duke can crowd-source information on.

Regarding the data being input by users, we are assuming that each file uploaded is, in fact, an image file (with no quotes in the name), as we are not yet checking for that in this implementation of the website. We are also assuming that there are more requests to look up tags than there are to rate and tag items, and thus that look-up efficiency matters more than input efficiency when determining overall performance of the application. Further, for purposes of accurate summation, we are assuming that a unique tag is only used once per item submission, and that a user will only submit an item rating once.

List of Tables:

1. Things
   1. Contains the name of every item that has ever been rated, and the average rating for that item.
2. Ratings
   1. Contains every individual rating given to an item by a user, the item each rating is associated with, and the user ID of the user who gave them that rating.
3. Tags
   1. Contains every instance of a “thing” being tagged. Each row contains the thing and an associated tag.
4. User
   1. Contains every user. Currently acts as a table of every user “session,” as a user ID is assigned every time the page is re-opened.

E/R Diagram