

HOMEWORK 1

CS 465 Principles of User Interface Design

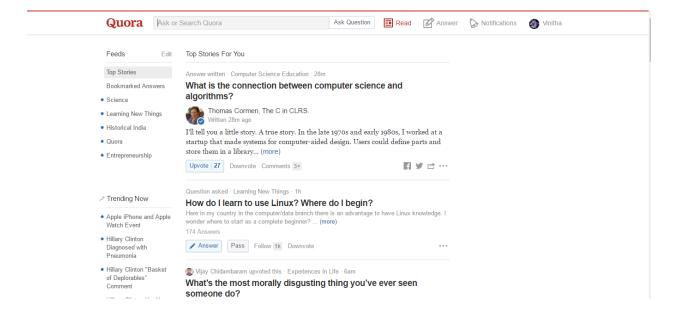


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Algorithm/Platform:

Quora's news feed algorithm is chosen as the algorithm for this assignment. Quora is a question-answer site where users can ask questions, write answers, suggest edits to answers. Users can also and up-vote and down-vote answers. This is similar to the 'like' concept of Facebook. The news feed essentially consists of questions and answers from topics and people who whom you followed and popular answers which people whom you have followed have up-voted.

Below is the screenshot of the home page with the news feed:



Reasons for choosing this algorithm:

One of the major reasons for choosing is algorithm is the user base that Quora has. As of 26 June 2016, there were 2,859,092 registered users on Quora. The news feed of each user is different and is aimed at showing those content that is of interest to the user. Thus each user has their own understanding of how the application works. Thus there are more folk stories.

The second reason being that the content in the news feed is primarily dependent on the users and their interaction with other people in the application. Thus each conceptual model can be defined in terms of user actions such as up-voting, following, sharing the answers. Therefore, the designers can enrich the user experience/interaction by taking these conceptual model into account.

Conceptual Models from Users:

Model 1:

The user was an applied math grad student who has used Quora for a year now. The user believed that if she read an answer written by a person. The chances are more likely that the answers from the same person will appear in the news feed for the following few days. She also felt that if she visited a writer's profile, then the chances of finding the previous popular answers of the user in the news feed is more. Also explicitly following a topic or requesting an answer leads to not only getting more answers related to that field but also notifications. She believed unfollowing a person or a topic is the ultimate way to modify the newsfeed. She also admitted down-voting a user's answer in an attempt to reduce the chances of seeing more answers from the user.

The conceptual model of the user is similar to the **Personal Engagement Theory** discussed in the paper. They believed that the feed curation was dependent on their interactions with the writers of the answers. Their engagement mainly included up-voting the answer. Apart from that other forms of engagement that affect the algorithm include down-vote, following and unfollowing people, following and unfollowing topic, request answer etc. Similar to Facebook, the user believed that Quora kept track of the user activity and chose which answers to show based on it.

Model 2:

The user was an Industrial engineering student who has been using Quora for over two years. She believed that the more popular a person was, the more chances of the person's answer to appear in the news feed. She also said that the answers of the top writers i.e. those who are ranked highly by the Quora's people ranking algorithm is likely to appear in the newsfeed than the answers of others. She also felt that because of this, the chance of a good answer of a not so popular person making to the news feed of a wider audience is less. She also admitted up-voting her friend's answer in an attempt to make it popular and to get more views.

This conceptual model is similar to the **Global Popularity Theory** discussed in the paper. They believed that the likelihood that content a would appear was predominantly measured by the number of "up-votes" and comments made by others. They also believed that they can influence other's news feed by making answer, writers or topics more popular.

Model 3:

The user was a computer science grad student who has been using Quora for almost 4 years now. She was an active writer in Quora and believed that an answer with more pictures and better illustration got more number of views than a simple text answer. Since Quora picks which answers to show to its users, by adding more pictures she increases the probability of her answer appearing in other's newsfeed. She also admitted to following a lot of people so that they in turn follow her there-by, whenever she writes an answer the chances of her answer appearing in others' newsfeed is more. She also believed in the concept of commenting on a lot of answers so that whenever she writes an answer people will recognize her name and up-vote it or follow her.

Though the above user's conceptual model is similar to the folk theories discussed above. An interesting point to be noted is that the user believed the format of the answers affected its presence in other's newsfeed. This is similar to the **Format Theory** discussed in the paper. The user believed that a certain type of answer made to the newsfeed than the others. Like how the Facebook users believed that stories containing plain text spread faster than those containing videos and images, similarly, in Quora answers with pictures are more popular than those which contain plain text.

Benefits for Design Team:

Since the users believed that reading an answer can lead to more answers from the same writer
appearing in the user, we can have an option similar to Facebook's "View more posts like this".
 This has two benefits

- a. The designer can prioritize among the topics that the user follows and show more from the topics he likes that those he doesn't like but has followed. This improves the quality of the newsfeed.
- b. A writer can write answers on various topics and the current algorithm shows all the answers that a writer writes. By having this option, the user can read answers from their favorite writers on the topics that interest them.
- 2. Also the users follow a number of people in a hope to get more followers. This leads to their newsfeed being spammed with answers from various writers. So having an option like "View more from this writer" will:
 - a. Help the people ranking algorithm to rank the people followed by the user not just by their overall popularity but also based on how the user ranks the writer.
 - b. Help amateur writers gain more readers despite not being popular on Quora. This enables the user to read quality answers from people they like even if they are not famous. Thus enhancing user experience.
- 3. If users are given a chance to arrange the writers into groups such as "Never Miss Out", "Standard "and "Mute" then, they can have an option to read more from the writers that they like. In this way they won't have to unfollow people so as to see less answers from them. The same can be applied for topics also. Thus the quality of the newsfeed can be increased.
- 4. Users comment on others' answers in an attempt to promote themselves. Rather having an option "Get Promoted" will help amateur writers get more up-votes. Also readers will have an option to "Promote" an answer which will lead to the post to occur in all their followers newsfeed. This helps good answers to get popular easily. This will in turn help in ranking amateur people for the newsfeed algorithm.

Revised User Interface:

Quora's news feed algorithm is similar to the page rank algorithm used by google. The only difference being that Quora ranks people instead of pages. Thus it is more likely to see answers and questions associated with popular people than the others. Popularity is determined by a combination of the number of up-votes that a person's answer gets, the number of followers a person and several other factors.

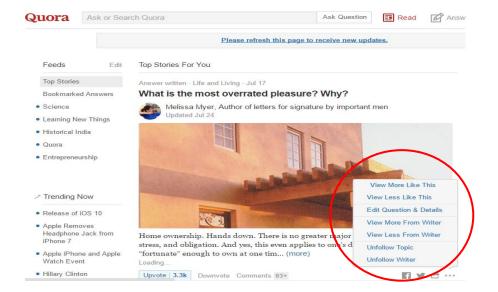
Since Quora heavily depends on the people rank algorithm to design the newsfeed for the users. If users both the readers and writers where given the transparency to rank people and topics they like, the quality and relevance of the newsfeed can be improved.

Design Suggestion 1:

Giving the users option to prioritize the stories that are shown in the newsfeed without having to explicitly follow/up-vote or unfollow/down-vote the topic or the writer.



Modified: The new set of options allow the user to contribute to the ranking algorithm by expressing whether they would like to view more/less from the writer or the topic. Also the "unfollow" option is easily accessible by keeping it the drop down.



Design Suggestion 2:

When there are a lot of new amateur writers, instead of just relying on up-votes to rank them. The writers can be given an option to get promoted. This leads to their answer to appear more on newsfeed of others increases for a day and based on the promotion they receive, they can be ranked.

a) As a Reader: The below is the UI that is shown to the reader of the answer.

Actual: No option for promoting the answer





"Your thoughts are a mirror to your emotions."

If you feel happy, your thoughts will be good..You will feel motivated.

If you are sad, it is very tiring for your brain. Thereby your thoughts are demotivated.

58 Views



Modified: The reader can promote the answer to his followers. Thus help the answer get popular and contribute to the people ranking algorithm.

How do emotions impact thoughts?



"Your thoughts are a mirror to your emotions."

If you feel happy, your thoughts will be good..You will feel motivated.

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56 Views



a) For the writer: The below is the UI that is shown to the reader of the answer.

Actual: No option to get promoted

How do emotions impact thoughts?

Vinitha Ravi · Add Bio
Written Jan 27, 2015

"Your thoughts are a mirror to your emotions."

If you feel happy, your thoughts will be good..You will feel motivated.

If you are sad, it is very tiring for your brain. Thereby your thoughts are demotivated.

59 Views

Upvoters 0 Comment

Modified: Option to get promoted for this answer.

How do emotions impact thoughts?

is it really worthy to keep away from emotions?



"Your thoughts are a mirror to your emotions."

If you feel happy, your thoughts will be good..You will feel motivated. If you are sad, it is very tiring for your brain. Thereby your thoughts are demotivated.

56 Views



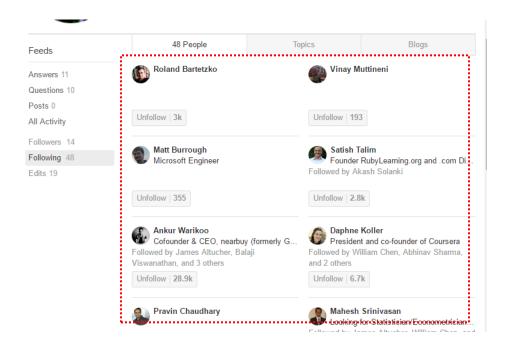


Design Suggestion 3:

Instead of the people ranking algorithm decided which news feed to show. The users can group the writers that they follow and topics that they follow, so as to read answers that interests them only.

The following illustration are for grouping writers the same can be done for Topics too.

Actual: The writers are in the chronological order of being followed. There is no way to rank writers.



Modified: The users have an option to tag the writer as "Never Miss Out" (Favorite) and "Mute" (least favorite). The rest are tagged as standard.

