CoffeeShop

Garrett Wu, Steven Stein

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1 Operational Concepts

CoffeeShop is community-driven information tool with the objective of providing each user with the set of articles, blog postings and other information which they would find most interesting. At its core, CoffeeShop is a reader which allows you to subscribe to RSS feeds for news sites, personal webblogs and various other types of information.

What differentiates CoffeeShop from RSS readers currently available is that it will

- Determine topics which interest the user
- Connect and facilitate discussion between users having similar interests
- Gauge popularity and quality of RSS feeds and individual articles
- Leverage this information to present individual articles and feeds to the user that they are likely to be interested in, but are not subscribed to.

The basic objective of CoffeeShop is to connect users with the information and people they would be most interested in.

2 System Requirements

CoffeeShop should have the following features.

• Web-based RSS reader

A user should be able to login to CoffeeShop to view updates to their subscribed RSS feeds as they may using any of the currently available RSS readers out there. This should most likely be web-based like google reader rather than a downloadable client.

• Searchable set of feeds

Whenever a user subscribes themselves to an RSS feed, the feed may then be added to a collection of known RSS feeds to be stored in a database. These known feeds are searchable, so as more users add subscribe to various RSS feeds which they have found the amount of searchable content increases.

• Tagging of RSS feeds

Users will want the ability to organize the various feeds they are subscribed to. So in typical Web 2.0 fashion users should be able to tag RSS feeds. These tags may be used globally to classify what the RSS feed is about and discover what the user's interests are.

• Suggested Readings

Based on the user interests and the quality/popularity, articles and feeds should be suggested to the users. Additionally feeds and articles that interest people with similar interests to the user may be suggested to the user. This would be along the lines of Amazon's "Users who purchased this item also shopped for __". Instead it would be "Users who are interested in __ and __ also subscribe to __".

• Bookmark and Comment on articles

Users should have the ability to discuss blog entries or articles with other members of the community. Each article from an RSS feed should be uniquely identifiable to the system. At the time when the first user updates an RSS feed which contains a new item, the item is entered into the database and may be commented on. Users should also be able to bookmark and follow discussions.

• Track article/feed popularity

By keeping track of how many users are subscribed to each feed, and the number of outgoing clicks on individual articles within the feed we can determine what the most popular feeds and hot articles are. Using this information CoffeeShop could make the most popular feeds and articles viewable. Coupled with the user tags, a user could find the most popular feeds/articles in a certain category.

• Optional user profiles

While some users will prefer to remain anonymous, others will want the option to connect with users having similar interests. This profile would contain things like name, location, interests, personal blog url etc.

• Marking articles as "interesting"

Users may bookmark certain articles which they find to be particularly interesting. This would serve multiple purposes. First of all, it would allow that particular user to keep track of what they like. Additionally it can be used as a rating for the article – articles which many people have marked as being interesting would be more likely to be suggested to other users. If the user chooses to allow this, the user's set of articles marked as "interesting" can be made publicly viewable by other users.

• Becoming a Fan

Rather than enforcing the standard friend-friend relationship that is typical of most social networking services in existence, we would have the notion of being a "fan" of someone. If you find that a particular user has particular insight or expertise on a topic, you can become a fan of them and even subscribe to the comments which they have made and the articles which they have marked as "interesting".

Users would be able to view their list of fans, and suggest articles to their fans. Suggestions may only be made to people who are fans of you.

• View users with similar interests

There should be the option to view a list of other users who have similar interests as you do. These interests can be determined by both the interests noted in the user's profile and the tags associated with the feeds subscribed to by the user.

• Triggers

Users may want to be notified when an article or blog entry references a certain term. For example, if I want to be notified about any news on the local startup company Zillow.com. Instead of manually checking Google News and Google Blogsearch every day for new references to Zillow, I would set a trigger which would notify me when a new article contains that term.

• Targeted text advertising

Implementation of this would not be necessary at this time, but knowledge of user interests that have been determined from user profiles and their subscriptions can be used to display well targeted text advertisements. We say text ads only because one of the reasons users enjoy RSS feeds is that it is a way to avoid annoying graphical and animated advertising that is far too common on news sites.

3 System and Software Architecture

The implementation of CoffeeShop should be straightforward. On the server side, we will run an http server (Microsoft IIS) and a database server (SQL Server 2005 Express). The client will be a web browser.

4 Lifecycle Plan

RSS is a technology which has been rapidly growing in popularity as more internet users turn to the web for news and with the rapid growth of blogging as an outlet for expression of ideas and opinions.

Our initial target market will be users who already use RSS. CoffeeShop offers the following benefits over other RSS readers:

- Easy to find interesting and relevant articles CoffeeShop suggests articles and feeds based on the user's profile, reading history, and fans.
- Leverages community participation See user opinions all in one place.
- Many more... See the features list above.

5 Feasibility Rational

There are two things to consider when deciding whether this is a feasible project to undertake.

• Can we get this done in less than 10 weeks?

Sure! There aren't too many algorithmically challenging problems in our feature set. Suggesting articles to users may be the only exception.

• Even if we finish it, will people actually use it?

People need RSS readers. We feel that we're adding value to the existing experience by leveraging the community. Another crucial factor will be speed and usability.