



RSS Narrative

The Social RSS platform is used as an aggregator for feeds and supports two primary feature sets: (1) feed subscription/reading and (2) social networking. Since you will be interacting with two distinct teams in the design of this database, you should produce two local ERD views, but a single logical schema.

1 Feed Subscription/Reading

- Users have a unique e-mail address (used for login), a password, and a set of authorized app keys (e.g. to authorize mobile apps).
- A feed has a unique URL, an icon, a timestamp of the last time the system checked that URL for new articles, and a format version. The system supports only Atom and RSS data formats; if the feed is Atom, it is important to know the format used for articles (there is a single standard for RSS).
- Users organize their feeds into a set of categories, each having a unique name (though different users can have categories that have the same name). When a user puts a feed into a category, they provide the feed a name, which can be the same or different than any other feed, including the same feed in another category.
- A feed is populated by a set of articles. Each article has an id, which is unique within that feed, a URL, a timestamp of when the feed was posted, and a title. Articles may optionally also contain text and/or a picture, designated by the URL to the picture. Some articles also have a single enclosure, which is composed of a single URL and a data format. The system only supports two types of enclosures: audio and video. For either type, the data format of the enclosure tells the system how to present the enclosure, but if the enclosure is a video type, then the system also needs to know the size.
- The core purpose of the system is for users to be able to read articles. The system keeps track of whether a user has read an article, whether the user liked the article, and whether the user starred the article (and thereby keeping it for later perusal). The system is designed to avoid showing the user duplicate articles; that is, even if a user has organized a particular feed into multiple categories, s/he should only read an article once.
- To inform readers of popular articles and feeds, it is important to know how many times an article has been viewed and liked, as well as how many users have a feed in their categories.

2 Social Networking

- To help share articles and feeds, the system supports users “following” other users, much like in Twitter. However, for user privacy, when a user requests to follow another user, that request must be approved before it takes effect.
- In addition to e-mail/password, users also have a profile, which is composed of a unique user name (may or may not be her/his real name), a picture, a bio statement, and an indication of whether the profile is to be kept private. The profile also indicates how many followers the user has, as well as how many s/he is following.
- Users can post status updates, much like Facebook. Each update has a unique ID (used for internal tracking), the date/time of posting, and the text of the post. Users can like the update and can comment on it. A comment contains a date/time of posting as well as the text of the comment. Users can like and/or comment on their own status update(s).