

Social media feed

Target: As a result of completing the H/W, I created a social network news feed in accordance with the requirements.

Repository: https://github.com/maleykovichdim/social_net_rss_redis

Deployment: <https://social-net-rss-redis.herokuapp.com/>

I used Redis as a cache.

1st Stage:

I added 2 tables in a mysql DB:

```
create table if not exists posts
(
  `id` int(11) NOT NULL AUTO_INCREMENT,
  `author_id` int(11) NOT NULL,
  `content` TEXT NOT NULL,
  `created_at` timestamp DEFAULT CURRENT_TIMESTAMP,
  PRIMARY KEY (`id`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;

CREATE TABLE IF NOT EXISTS follows (
  follower_id int(11) NOT NULL REFERENCES users ON DELETE CASCADE,
  followee_id int(11) NOT NULL REFERENCES users ON DELETE CASCADE,
  UNIQUE (follower_id, followee_id)
);
```

I added a button (**Follow**) to the page to set up subscribers:

The screenshot shows a dark-themed user profile form. On the left, there are three input fields: 'gender:' with the value 'female', 'City:' with the value 'Leonieton', and 'Email:' with the value 'vimpftfbuupjvh38@gma'. Below these is a button labeled 'Offer friendship'. Further down is a button labeled 'Follow'. At the bottom left, the text 'Friends:' is visible. On the right side, there is a section titled 'Interests:' containing a large text area with the placeholder text 'personal info'. At the bottom right of this section is a button labeled 'Change'.

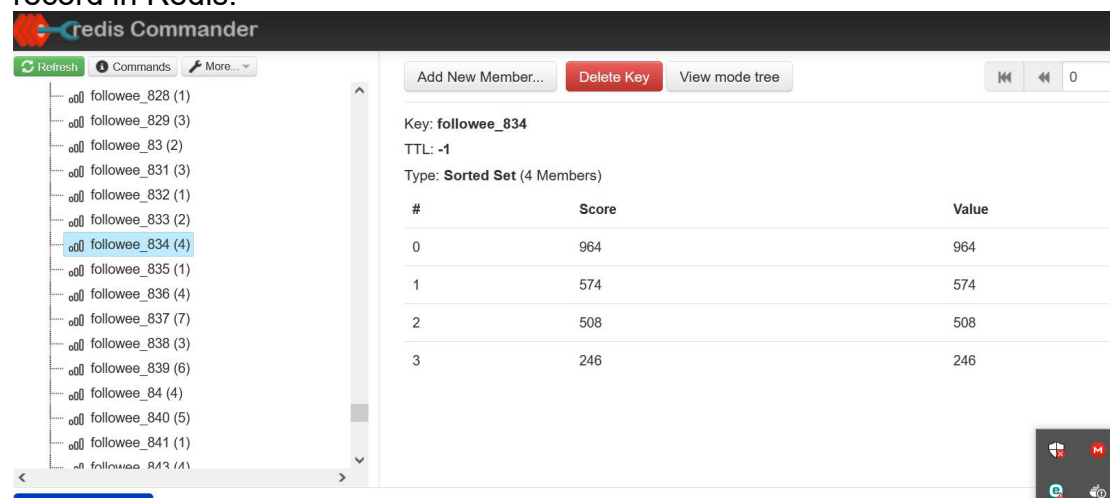
* You can also add **subscribers**, **posts**, get/create **rss feed** by using Java application from “client” folder.

I created several http requests:

```
//posts+follower+rss for http requests from html pages
1. api.HandleFunc("POST", "/auth_user/post", h.userPost) //add post
2. api.HandleFunc("POST", "/auth_user/follow", h.follow)
3. api.HandleFunc("GET", "/auth_user/rss_feed", h.rss)
4. api.HandleFunc("GET", "/auth_user/is_follower", h.isFollower)

//only for test purposes without authorization for Java App
api.HandleFunc("POST", "/user/postTest", h.userPostTest)
api.HandleFunc("POST", "/user/followTest", h.followTest)
api.HandleFunc("GET", "/user/rss_feed", h.rssTest)
```

2. this request sets “follower” for current user in the mysql db and generates record in Redis:



The screenshot shows the Redis Commander web interface. On the left, a tree view lists various keys, with 'follower_834 (4)' selected and highlighted in blue. The main panel displays details for this key: 'Key: follower_834', 'TTL: -1', and 'Type: Sorted Set (4 Members)'. Below this, a table lists the members of the set:

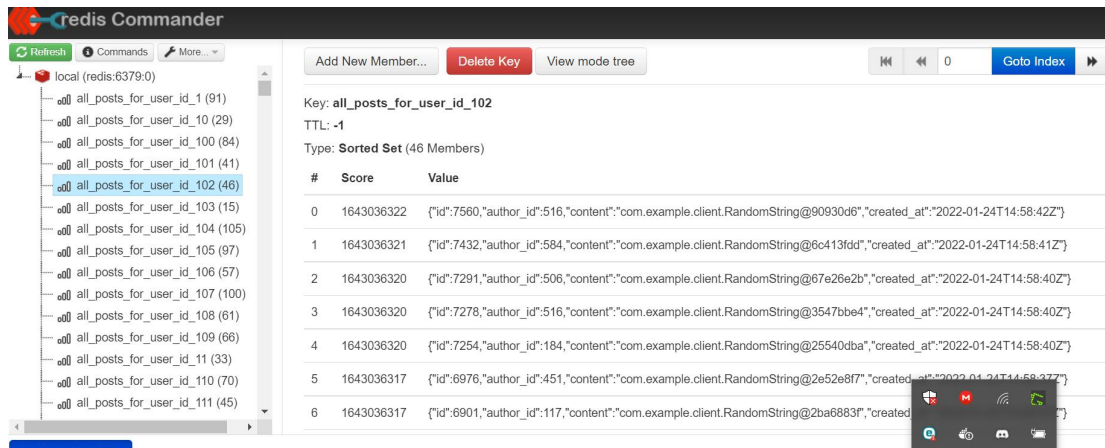
#	Score	Value
0	964	964
1	574	574
2	508	508
3	246	246

These records are inverted. The key is generated using the user Id for which there were subscriptions.

Description of numbered requests:

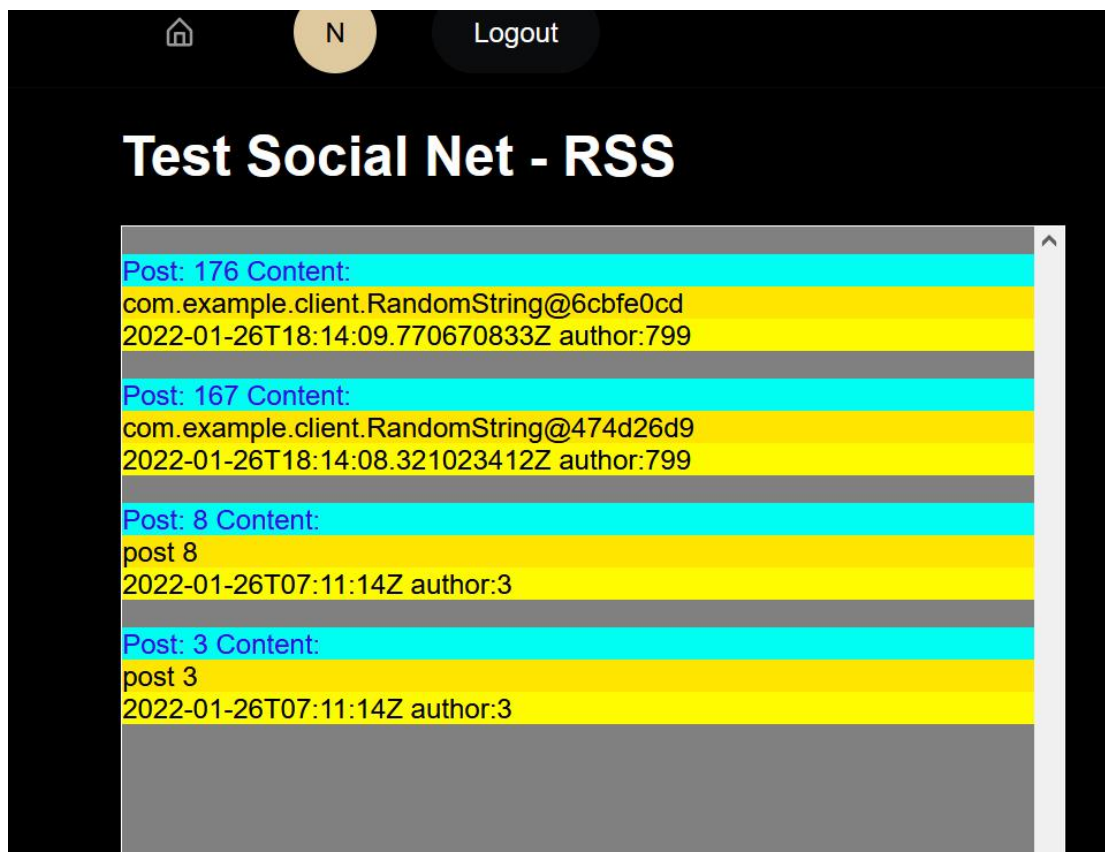
4. This request checks: are you following the user whose personal information you are viewing...

3. This request gets a new feed data from Redis if it has an appropriate record



or generate it from the mysql db and put into Redis.

1. This request put a post in the mysql db and after looking up the followee keys in Redis, add the post to the corresponding news feeds in Redis.



For the page above use the following button:

Friend requests - click + to approve:

Friends:

Friends:

ADD POST

RSS