

## Lab 13.1: Modeling Following/Followers

### IN705 Databases Three

## Introduction

Now that we have our Riak data store in place and our models started, today we will work on adding the following/followers relationship. Each user maintains a list of users followed and a list of users who follow it. Adding a following relationship between two users, where *User A* follows *User B* consists of adding *User B* to *User A*'s **follows** list and adding *User A* to *User B*'s **followers** list. Deleting the relationship is a matter of deleting the respective users from each others' lists.

One additional consideration is that in some cases we are creating a new list (when a user has not yet followed or been followed by anyone) and in other cases we are appending to an existing list.

## 1 Implementing the follows relationship

We will add this functionality from the outside in by first writing our controller's **add\_follows** method. The basic plan is to

1. Get the following and followed user;
2. Append the user id's to the appropriate lists (creating the list if it does not exist);
3. Update both users.

The **add\_follows** method looks like this:

*file: app/controllers/users\_controller.rb*

```
# POST /users/follows
def add_follows
  db = UserRepository.new(Riak::Client.new)
  @follower = db.find(params[:id])
  @followed = db.find(params[:follows_id])

  if db.follow(@follower, @followed)
    head :no_content
  else
    render json: "error saving follow relationship" , status: :unprocessable_entity
  end
end
```

We can see that we need to add the **follow** method to the **UserRepository** class.

*file: app/models/user\_repository.rb*

```

def follow(follower, followed)
  if follower.follows
    follower.follows << followed.email
  else
    follower.followed = [followed.email]
  end

  if followed.followers
    followed.followers << follower.email
  else
    followed.followers = [follower.email]
  end

  update(followed)
  update(follower)
end

```

Unfollowing is basically a mirror image of the `follow` method and is left as an exercise. The `show_follows` method also needs modification to work with Riak but is also straightforward.