

## Lab 3.2: Producing a Splatter News Feed

### IN705 Databases Three

## Introduction

Now that our models support following, we can produce a feed of the splatts belonging to each of the users a particular user follows. This feed, which we will return as a JSON array, should be presented in descending chronological order.

## 1 Retrieving the feed data

The feed is just a list of splatts. But how can we get the list? Given the capabilities of our models, we have a few choices.

1. Given a user, iterate over the users followed by that user. For each, retrieve the list of splatts. Merge those lists into a unified list with the desired order.
2. Explore the capabilities of ActiveRecord models and see if we can find methods that will do the above more simply and efficiently.
3. Write an SQL query that returns the desired list and execute it directly.

Option 1 would work, but it would be inefficient. Option 2 *might* work and has much to recommend it, but frankly I don't care. Option 3 will work. It is simple to implement and it leverages the capabilities of the RDBMS. Finally, it demonstrates how we can use the ORM to use raw SQL when it suits us, and this is my not-so-hidden agenda.

To retrieve the feed data, we will use ActiveRecord's `find_by_sql` method to retrieve a list of splatts. Add a method to your UsersController like this:

```
# GET /users/splatts-feed/1
def splatts_feed
  @feed = Splatt.find_by_sql()

  render json: @feed
end
```

All you need to do is write an SQL query that produces the sorted list of splatts. This is left as an exercise, since you all took Databases 2.

Don't forget to add a route for your new method.

## 2 Formatting our JSON

That's not really all you need to do.

So far, we have just been rendering JSON using the `render` method. But we would like to be able to control our JSON formatting more explicitly. It turns out that Rails 4 has a view facility for JSON called `jbuilder`.

There is a good introductory article about `jbuilder` at <http://richonrails.com/articles/getting-started-with-jbuilder>. Using that article as a reference, use `jbuilder` to format the JSON for your new `splatts` feed.

Once you have that working, use `jbuilder` for other methods that need explicit formatting, like the `UserController`'s `show` method.