```ruby
 7    unless params["filter"].nil?
 8        #filter params which have the string "<filtertype>,<post/tagID>,<tag/uniname>"
 9        @filter = params["filter"].split(",")
10        @filter_type = @filter[0]
11        @filter_id = @filter[1]
12        @filter_name = @filter[2]
13    else
14        @filter = nil
15    end
```

*Listing **A** controllers/account_moderation_feed.rb*

```ruby
11    @user = User.new
12    @user.login(params)
13    @error = nil
14
15    if @user.exist? && @user.valid?
16      @logged_in_user = User.where(username: params.fetch("username","")).first
17
18      session[:logged_in] = 1
19      session[:is_guest] = 0
20      session[:account_type] = @logged_in_user.account_type
21      session[:userID] = @logged_in_user.userID
22      session[:username] = @logged_in_user.username
23      session[:universityID] = @logged_in_user.universityID
24
25      redirect "/"
26    else
27      @error = "The username or password that you entered is incorrect, please try again"
28    end
```

*Listing **B** controllers/login.rb*

```ruby
29  # Create university records if they don't exist
30  def create_universities
31      File.open("db/universities.txt") do |university_list|
32          university_list.each do |university|
33              DB[:universities].insert(university_name: university.chomp)
34          end
35      end
36  end
```

*Listing **C** db/db.rb*

```ruby
  3      def load(params)
  4          if params.fetch("is_guest", "") == 1
  5              self.is_guest = 1
  6          else
  7              self.is_guest = 0
  8              self.userID = params.fetch("userID", "")
  9          end
 10
 11          self.title = params.fetch("title", "").strip
 12          self.message = params.fetch("message", "").strip
 13          self.date_posted = Time.new.strftime("%Y-%m-%d %H:%M:%S").to_s
 14
 15          # If user is moderator or admin, post doesn't need to be moderated
 16          if params.fetch("account_type").to_i == 2 || params.fetch("account_type").to_i == 3
 17              self.is_moderated = 1
 18          else
 19              self.is_moderated = 0
 20          end
 21
 22          self.image_link = params.fetch("image_link", "").strip
 23
 24          # If image link is empty, post doesn't have an image
 25          if params.fetch("image_link", "").strip.empty?
 26              self.is_image = 0
 27          else
 28              self.is_image = 1
 29          end
 30
 31          self.universityID = params.fetch("universityID", "")
 32      end
```

*Listing **D** models/post.rb*

```ruby
 26      def type_of_account
 27          # Return name of account type
 28          if account_type == 0
 29              "Reporter"
 30          elsif account_type == 1
 31              "Viewer"
 32          elsif account_type == 2
 33              "Moderator"
 34          elsif account_type == 3
 35              "Administrator"
 36          else
 37              # If a wrong number is somehow entered, return nothing
 38              ""
 39          end
 40      end
```

*Listing **E** models/user.rb*

```erb
 50          <%#University filter doesn't appear on mod's post moderation feed%>
 51          <% unless @page_title == "Moderate Posts" && @user[:account_type] == 2 %>
 52          <optgroup label="By University">
 53              <% University.each do |uni| %>
 54                  <option value="uni,<%= h uni.universityID %>,<%= h uni.university_name %>"><%= h uni.university_name %></option>
 55              <% end %>
 56          </optgroup>
 57          <% end %>
```

*Listing **F** views/common/feed_filter.erb*

```
 9              <% post_user = User[post.userID] %>
10              <% university = University[post.universityID] %>
11
12              <article class="feed_post">
13                  <p><b>'<%= h post.title %>'</b></p>
14
15                  <% if post.is_guest == 1 %>
16                      <p><em>By guest user.</em></p>
17                  <% else %>
18                      <p><em>By <%= h post_user.username %></em></p>
19                  <% end %>
20
21                  <p><%= h post.message %></p>
22                  <p><b><%= h university.university_name %>. Tags:</b></p>
23
24                  <% unless PostTag.where(postID: post.postID).nil? %>
25                      <% PostTag.where(postID: post.postID).each do |tag| %>
26                          <p><%= h Tag[tag.tagID].tag_name %></p>
27                      <% end %>
28                  <% else %>
29                      <p> None </p>
30                  <% end %>
```

*Listing **G** views/feed.erb*

```
 9  <form method="post" class="loginElement">
10    <label for="username"><p>Username:</p></label>
11    <input type="text" id="username" name="username" value="<%= @user.username %>">
12
13    <label for="password"><p>Password:</p></label>
14    <input type="password" id="password" name="password">
15
16    <% unless @error.nil? %>
17      <p style="color:red"><%= @error %></p>
18    <% end %>
19
20    <input class="button" type="submit" value="Submit" id="submitButton">
21  </form>
```

*Listing **H** views/login.erb*