Simple Rails Template

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en"
    lang="en">
  <head>
    <title>Hello, User</title>
  </head>
  <body>
    <p>
    This page was fetched at <%= Time.now() %>
    </p>
  </body>
</html>
```

Control Structures in Templates

```
?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en"
lang="en">
  <head>
    <title>Rails Parameters</title>
  </head>
  <body>
    <p>
    The <code>params</code> hash contains the
    following values:
    </p>
    <% params.each do |key, value| %>
      <p><%= key %>: <%= value %></p>
    <% end %>
  </body>
</html>
```

Control Structures, cont'd

Template:

```
...
<% params.each do |key, value| %>
  <p><%= key %>: <%= value %></p>
<% end %>
...
```

HTML:

```
...
  <p>x: 44</p>

  <p>y: 92</p>

  <p>action: showParams</p>

  <p>controller: rails_intro</p>
...
```

Controller: Compute Primes

```ruby
class RailsIntroController < ApplicationController
  def show_primes
    if params[:count] != nil then
      count = params[:count].to_i()
    else
      count = 10
    end

    @primes = []
    candidate = 2
    while @primes.length < count
      is_prime = true
      @primes.each do |prime|
        if (candidate % prime) == 0 then
          is_prime = false
          break
        end
      end
      if is_prime then
        @primes << candidate
      end
      candidate += 1
    end
  end
end
```

Query value determines # primes to compute

Fill in @**primes** array with prime numbers

Template to Display Primes
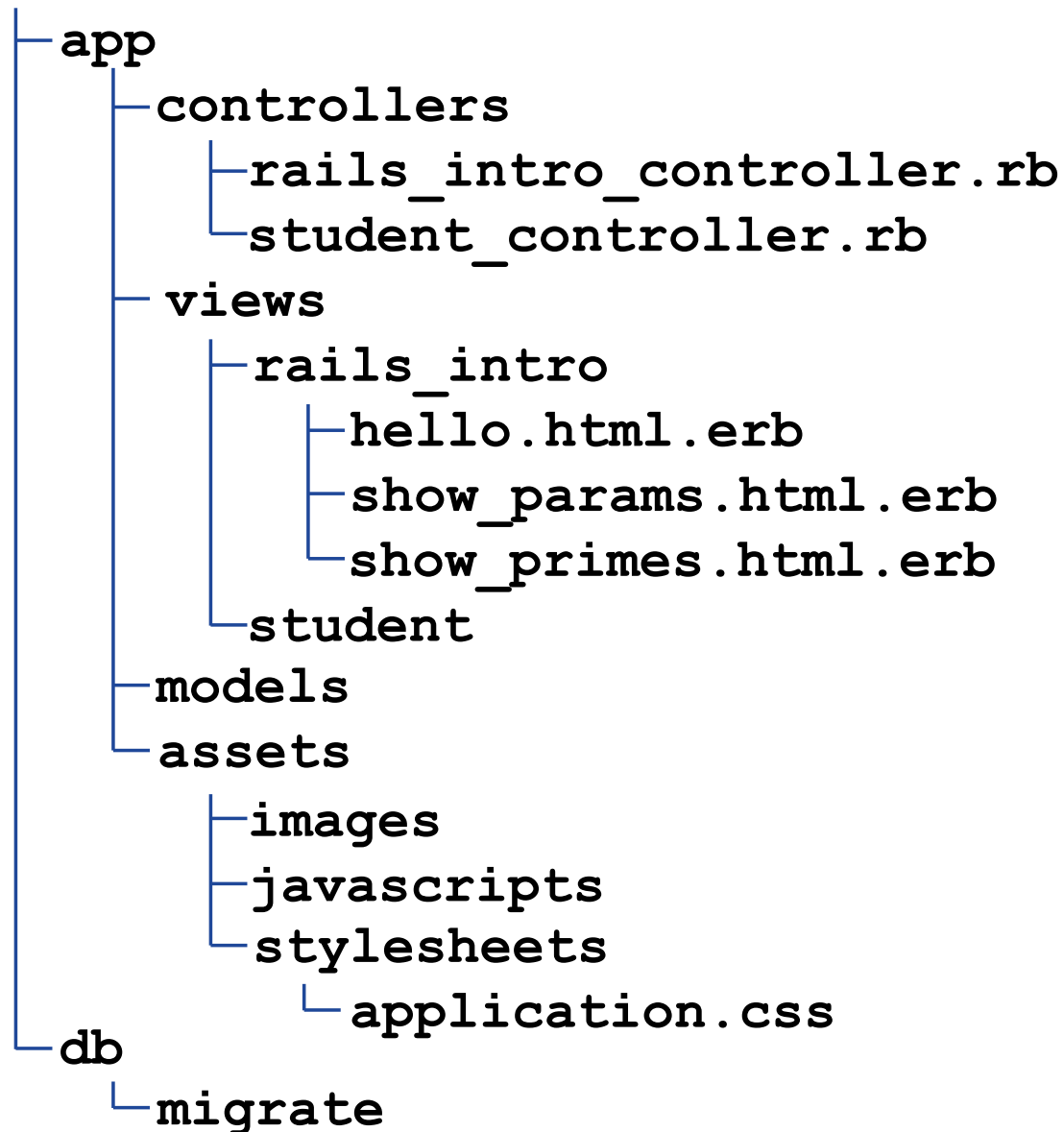
```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE ...>
<html ...>
  <head>
    <title><%= @primes.length %> Prime Numbers</title>
    <%= stylesheet_link_tag 'main' %>
  </head>
  <body>
    <p>
    The first <%= @primes.length %> prime numbers are:
    </p>
    <table class="oddEven" cellspacing="0">
      <tr class="header"><td>Prime Numbers</td></tr>
      <% @primes.each do |prime| %>
        <tr class="<%= cycle('odd', 'even') %>">
          <td><%= prime %></td>
        </tr>
      <% end %>
    </table>
  </body>
</html>
```

Directory Structure

```
├─app
│   ├─controllers
│   │   ├─rails_intro_controller.rb
│   │   └─student_controller.rb
│   ├─views
│   │   ├─rails_intro
│   │   │   ├─hello.html.erb
│   │   │   ├─show_params.html.erb
│   │   │   └─show_primes.html.erb
│   │   └─student
│   ├─models
│   └─assets
│       ├─images
│       ├─javascripts
│       └─stylesheets
│           └─application.css
└─db
    └─migrate
```

Layouts

app/views/layouts/application.html.erb:

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en"
    lang="en">
  <head>
    <title><%= @title %></title>
  </head>
  <body>
    <%= yield %>
  </body>
</html>
```

app/views/rails_intro/hello.html.erb:

```
<% @title = "Hello, user" %>
<p>
  This page was fetched at <%= Time.now() %>
</p>
```