

# Web Development

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Produced  
by

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# Lab07: Exercises

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# Exercise 1

- Currently marge and lisa appear on the home page as 'friends'. Add bart and maggie. Make sure that, when visiting the pages, the correct images appear.

The image displays three separate browser windows, each showing a different profile page from a system called "Spacebook".

- Homer Simpson's Profile:** The leftmost window shows Homer Simpson's profile. It features a large image of Homer at the top. Below it is a "Friends" section listing "marge, (drop)", "lisa, (drop)", "bart, (drop)", and "maggie, (drop)". A "Messages" section shows two messages: "marge says..." and "lisa says...". A "Leave Message" input field and a "Send" button are present. At the bottom is a "Back to home page" link.
- Bart Simpson's Profile:** The middle window shows Bart Simpson's profile. It features a large image of Bart riding a green skateboard. Below it is a "Messages" section showing a message from "lisa says...". A "Leave Message" input field and a "Send" button are present. At the bottom is a "Back to home page" link.
- Maggie Simpson's Profile:** The rightmost window shows Maggie Simpson's profile. It features a large image of Maggie sitting. Below it is a "Messages" section showing a message from "homer says...". A "Leave Message" input field and a "Send" button are present. At the bottom is a "Back to home page" link.

# Exercise 1 Solution

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- No change necessary to application, apart from introducing new links in home page:

```
<div class="ui list">
  <div class="item">
    <i class="right triangle icon"></i> <a href="/publicprofile/marge">marge</a>, (<a href="drop/marge">drop</a>)
  </div>
  <div class="item">
    <i class="right triangle icon"></i> <a href="/publicprofile/lisa">lisa</a>, (<a href="drop/lisa">drop</a>)
  </div>
  <div class="item">
    <i class="right triangle icon"></i> <a href="/publicprofile/bart">bart</a>, (<a href="drop/bart">drop</a>)
  </div>
  <div class="item">
    <i class="right triangle icon"></i> <a href="/publicprofile/maggie">maggie</a>, (<a href="drop/maggie">drop</a>)
  </div>
</div>
```

## HomeProfile/index.html

```
<div class="ui list">
  <div class="item">
    <i class="right triangle icon"></i> <a href="/publicprofile/marge">marge</a>, (<a href="drop/marge">drop</a>)
  </div>
  <div class="item">
    <i class="right triangle icon"></i> <a href="/publicprofile/lisa">lisa</a>, (<a href="drop/lisa">drop</a>)
  </div>
  <div class="item">
    <i class="right triangle icon"></i> <a href="/publicprofile/bart">bart</a>, (<a href="drop/bart">drop</a>)
  </div>
  <div class="item">
    <i class="right triangle icon"></i> <a href="/publicprofile/maggie">maggie</a>, (<a href="drop/maggie">drop</a>)
  </div>
</div>
```

## controllers/PublicProfile.java

```
public class PublicProfile extends Controller
{
  public static void index()
  {
    render();
  }

  public static void visit(String name)
  {
    Logger.info("Just visiting the page for " + name);
    render(name);
  }
}
```

## PublicProfile/visit.html

```
#{extends 'main.html' /}
#{set title:'Spacebook' /}

<nav class="ui menu">
  <a class="ui active item" href="/home">Back to Home</a>
</nav>

<section class="ui raised segment">
  <div class="ui small header"> ${name}'s Profile</div>
  <section class="ui two column grid segment">
    <div class="row">
      <div class="column">
        <div class="ui medium image">
          
        </div>
      </div>
      <div class="column">
        <h2> Messages </h2>
        <ul>
          <li>homer says..."What time is dinner?"</li>
          <li>lisa says..."Where is my saxaphone?"</li>
          <li>homer says..."Where are you?"</li>
        </ul>
      </div>
    </div>
  </section>
</section>
```

# Exercise 2

- Visit the members page - which shows a list of members + a 'follow' link. This is the source of members/index.html here:
- Note that each of the links is blank, and should be unresponsive (try them). Using step 4 of this lab as a guide, implement links in the above such that whenever the 'follow' link is selected, we log to the console the name of the member we want to follow.
- Eg - the CLI (DOS or Command prompt) might show:
- This will require that you create a new method in Java, and implement a call to the logger (as in step 4). NB: This exercise will also require a changes to the 'conf/routes' file. Specifically, you will need to introduce a new route to support the follow method, very similar to the 'visit' route we have implemented earlier

```
<div class="ui list">
  <div class="item">
    <i class="right triangle icon"></i> marge [<a href="home.html">fo
  </div>
  <div class="item">
    <i class="right triangle icon"></i> bart [<a href="home.html">fol
  </div>
  <div class="item">
    <i class="right triangle icon"></i> lisa [<a href="home.html">fol
  </div>
  <div class="item">
    <i class="right triangle icon"></i> maggie [<a href="home.html">fol
  </div>
</div>
```

```
08:37:23,766 INFO ~ Just visiting the page for marge
08:37:24,417 INFO ~ Just visiting the page for marge
08:37:27,320 INFO ~ Just visiting the page for lisa
08:37:30,430 INFO ~ Just visiting the page for bart
08:37:33,511 INFO ~ Just visiting the page for marge
08:56:10,652 INFO ~ Following marge
08:56:14,085 INFO ~ Following bart
08:56:16,802 INFO ~ Following maggie
```

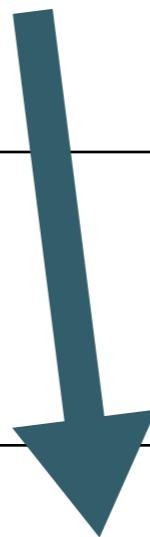
# Exercise 2

## Solution (1)

---

- Introduce ‘follow’ link...

```
<div class="ui list">
  <div class="item">
    <i class="right triangle icon"></i> marge [<a href="#">follow</a>]
  </div>
  ...
</div>
```



```
<div class="ui list">
  <div class="item">
    <i class="right triangle icon"></i> marge [<a href="/members/follow/marge">follow</a>]
  </div>
  ...
</div>
```

# Exercise 2 Solution (2)

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- Introduce ‘follow’ action...

```
public class Members extends Controller
{
    public static void index()
    {
        render();
    }

    public static void follow(String name)
    {
        Logger.info("Following " + name);
    }
}
```

# Exercise 2 Solution (3)

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- Introduce ‘follow’ route...

GET	/members/follow/{name}	Members.follow
-----	------------------------	----------------

# Exercise 2 Summary

- §

- marge [follow]
- bart [follow]
- lisa [follow]
- maggie [follow]

marge [[follow](/members/follow/marge)]

GET /members/follow/{name} Members.follow

```
public class Members extends Controller
{
    public static void index()
    {
        render();
    }

    public static void follow(String name)
    {
        Logger.info("Following " + name);
    }
}
```

```
08:34:23,788 INFO ~ Just visiting the page for maggie
08:37:24,417 INFO ~ Just visiting the page for marge
08:37:27,320 INFO ~ Just visiting the page for lisa
08:37:30,430 INFO ~ Just visiting the page for bart
08:37:33,511 INFO ~ Just visiting the page for maggie
08:56:10,652 INFO ~ Following marge
08:56:14,085 INFO ~ Following bart
08:56:16,802 INFO ~ Following maggie
```

# Exercise 3

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- If you get Exercise 2 working, then turn your attention back to the list of friends on the home page. What should the 'drop' link do? Implement something similar to the last exercise: i.e. have pressing 'drop' log a message to the console.
- Do this as follows:
  - Create a method in Home class called "drop"
  - it should take a single string as a parameter
  - it should log the string and a message to the console
  - a route should be set up in conf/routes to 'map' this route
  - edit the home/index.html to generate the correct link.
- If all goes according to plan, clicking on the links should cause log message to appear. However, the user interface will take you to a blank page each time. Can you change this? Try calling "index();" in the drop method.

# Exercise 3 Solution (1)

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- Create a method in Home class called "drop"
  - it should take a single string as a parameter
  - it should log the string and a message to the console

```
public class Home extends Controller
{
    public static void index()
    {
        render();
    }

    public static void drop(String name)
    {
        Logger.info("Dropping " + name);
        index();
    }
}
```

# Exercise 3 Solution (1)

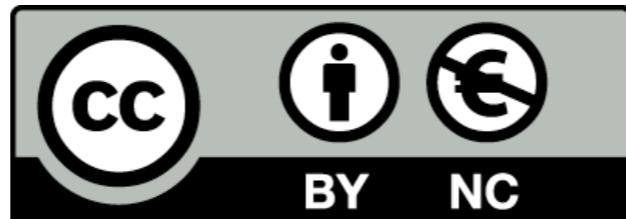
---

- a route should be set up in conf/routes to 'map' this route

GET	/home/drop/{name}	Home.drop
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- edit the home/index.html to generate the correct link.

```
<a href="/publicprofile/marge">marge</a>, (<a href="/home/drop/marge">drop</a>)  
...
```



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