# Web Development

Produced by

Eamonn de Leastar (edeleastar@wit.ie)

Department of Computing, Maths & Physics
Waterford Institute of Technology

http://www.wit.ie

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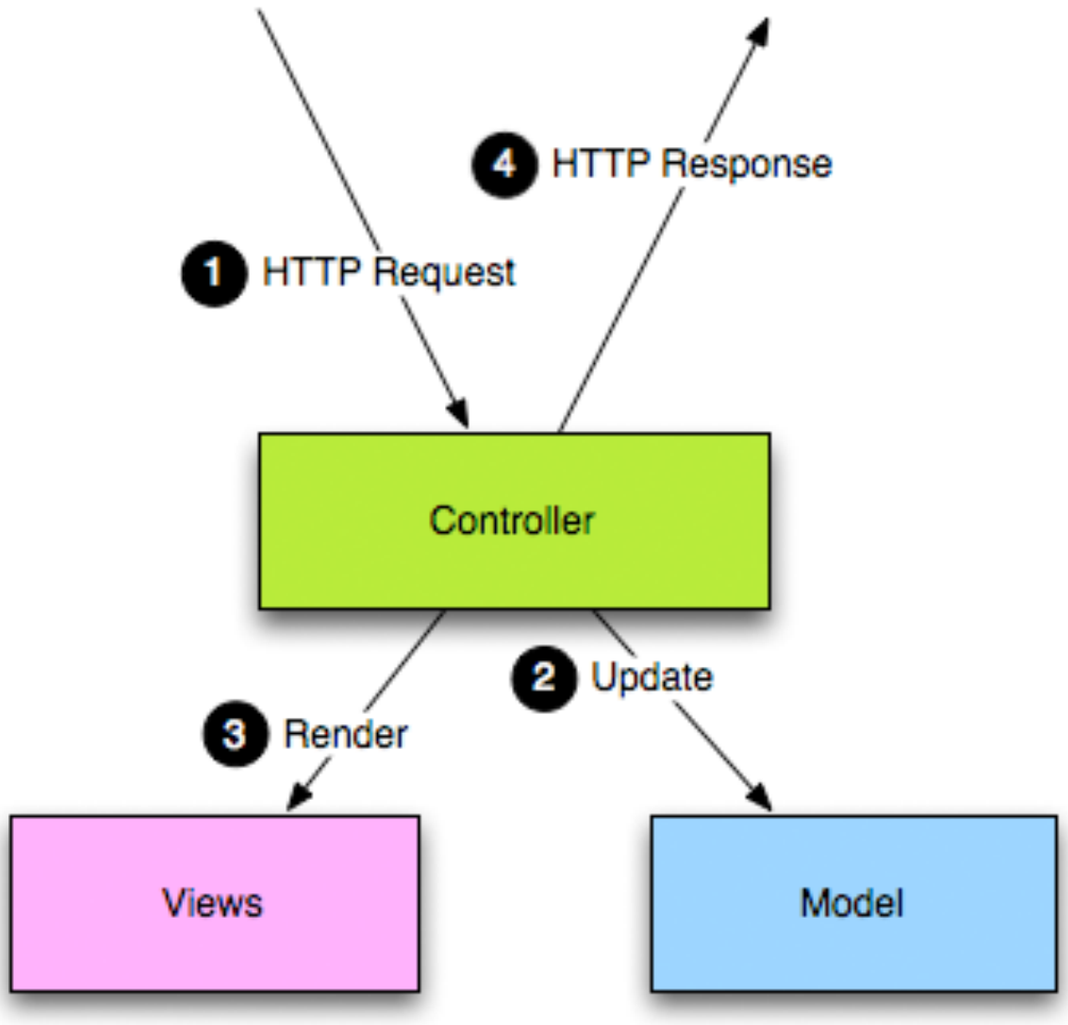
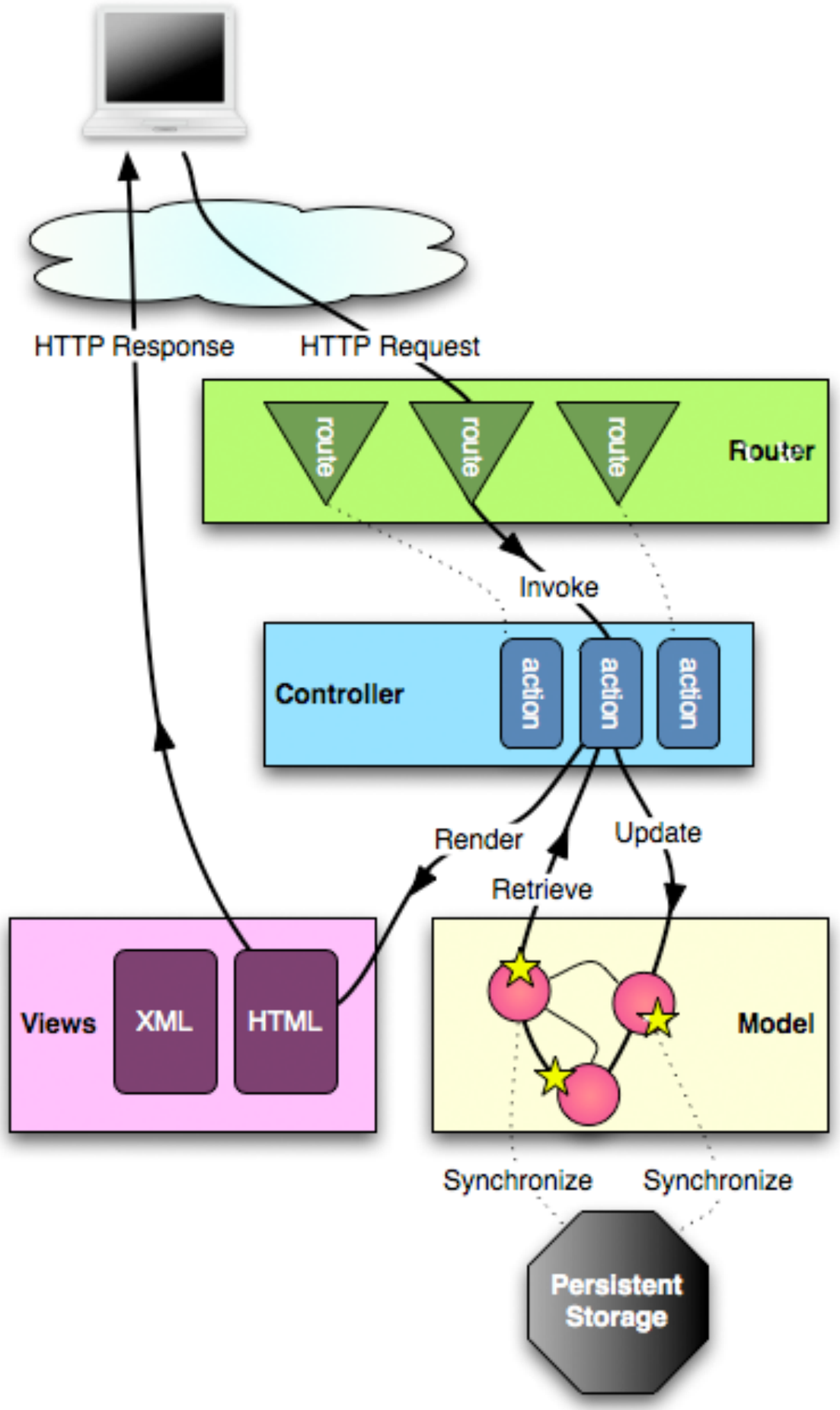
eLearning support unit

# Review of Spacebook so far

# HTTP Request/Response Cycle




HTTP Response
HTTP Request
route
route
route
Router
Invoke
Controller
action
action
action
Render
Update
Retrieve
Views
XML
HTML
Model
Synchronize
Synchronize
Persistent Storage

# Review Routes

```
GET     /                                       Accounts.index

# Accounts
GET     /signup                                 Accounts.signup
GET     /login                                  Accounts.login
GET     /logout                                 Accounts.logout
POST    /authenticate                           Accounts.authenticate
POST    /register                               Accounts.register

# Home page
GET      /home                                  Home.index
GET      /home/drop/{id}                        Home.drop

# Members page
GET      /members                               Members.index
GET      /members/follow/{id}                   Members.follow

# Profile page
GET      /profile                               Profile.index
POST     /profile/changestatus                  Profile.changeStatus

# Public Profiles
GET      /publicprofile/{id}                    PublicProfile.visit
```

```
public class Accounts extends Controller
{
  public static void signup()
  {
    render();
  }
  public static void login()
  {
    render();
  }
  public static void logout()
  {
    session.clear();
    index();
  }
  public static void index()
  {
    render();
  }
  public static void register(String firstName, String lastName, String email, String password)
  {
    Logger.info(firstName + " " + lastName + " " + email + " " + password);

    User user = new User (firstName, lastName, email, password);
    user.save();

    index();
  }

  public static void authenticate(String email, String password)
  {
    Logger.info("Attempting to authenticate with " + email + ":" +  password);

    User user = User.findByEmail(email);
    if ((user != null) && (user.checkPassword(password) == true))
    {
      Logger.info("Authentication successful");
      session.put("logged_in_userid", user.id);
      Home.index();
    }
    else
    {
      Logger.info("Authentication failed");
      login();
    }
  }
}
```

```
# Accounts
GET     /signup                     Accounts.signup
GET     /login                      Accounts.login
GET     /logout                     Accounts.logout
POST    /authenticate               Accounts.authenticate
POST    /register                   Accounts.register
```

# Accounts

# Home

```
# Home page
GET     /home                                       Home.index
GET     /home/drop/{id}                             Home.drop
```

```
public class Home extends Controller
{
  public static void index()
  {
    String userId = session.get("logged_in_userid");
    User user = User.findById(Long.parseLong(userId));
    render(user);
  }

  public static void drop(Long id)
  {
    String userId = session.get("logged_in_userid");
    User user = User.findById(Long.parseLong(userId));

    User friend = User.findById(id);

    user.unfriend(friend);
    Logger.info("Dropping " + friend.email);
    index();
  }
}
```

# Members

```
# Members page
GET     /members                                Members.index
GET     /members/follow/{id}                    Members.follow
```

```
public class Members extends Controller
{
  public static void index()
  {
    List<User> users = User.findAll();
    render(users);
  }

  public static void follow(Long id)
  {
    User friend = User.findById(id);

    String userId = session.get("logged_in_userid");
    User me = User.findById(Long.parseLong(userId));

    me.befriend(friend);

    Home.index();
  }
}
```

# Profile

```
GET     /profile                    Profile.index
POST    /profile/changestatus       Profile.changeStatus
```

```
public class Profile extends Controller
{
  public static void index()
  {
    String userId = session.get("logged_in_userid");
    User user = User.findById(Long.parseLong(userId));
    render(user);
  }

  public static void changeStatus(String statusText)
  {
    String userId = session.get("logged_in_userid");
    User user = User.findById(Long.parseLong(userId));
    user.statusText = statusText;
    user.save();
    Logger.info("Status changed to " + statusText);
    index();
  }
}
```

# PublicProfile

```
# Public Profiles
GET     /publicprofile/{id}                         PublicProfile.visit
```

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

  public static void visit(Long id)
  {
    User user = User.findById(id);
    Logger.info("Just visiting the page for " + user.firstName + ' ' + user.lastName);
    render(user);
  }
}
```

# Review Routes

```
GET     /                                       Accounts.index

# Accounts
GET     /signup                                 Accounts.signup
GET     /login                                  Accounts.login
GET     /logout                                 Accounts.logout
POST    /authenticate                           Accounts.authenticate
POST    /register                               Accounts.register

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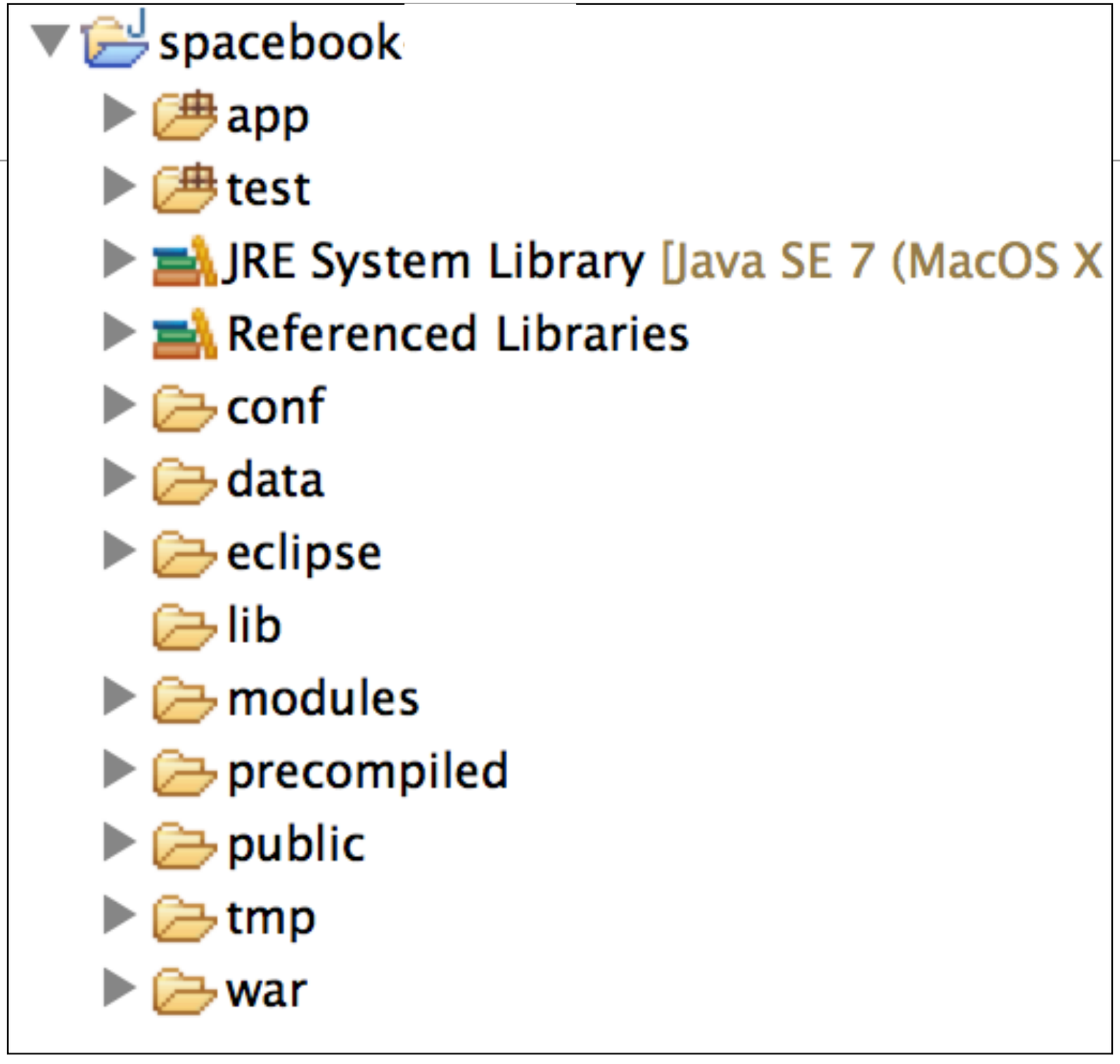
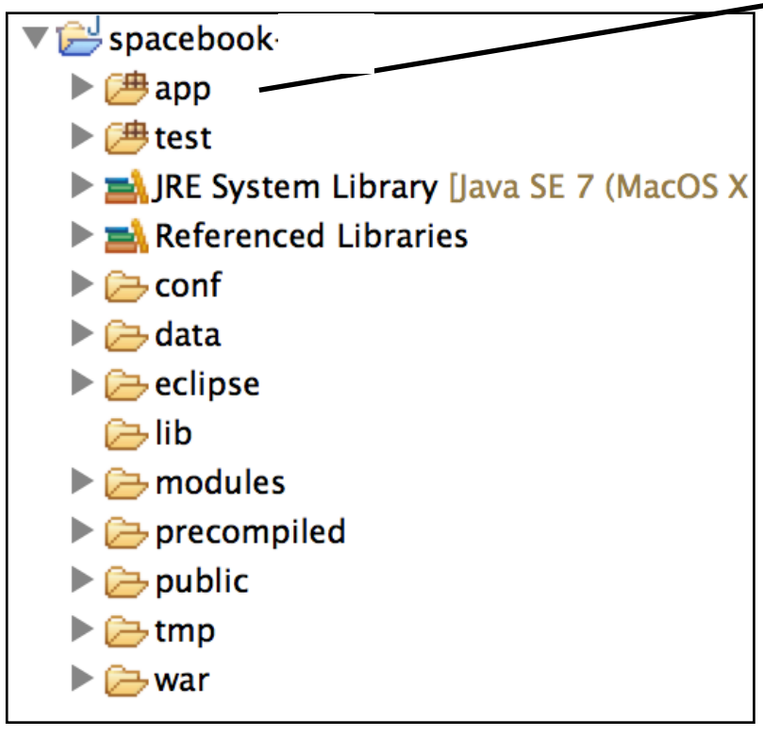

spacebook
app
test
JRE System Library [Java SE 7 (MacOS X
Referenced Libraries
conf
data
eclipse
lib
modules
precompiled
public
tmp
war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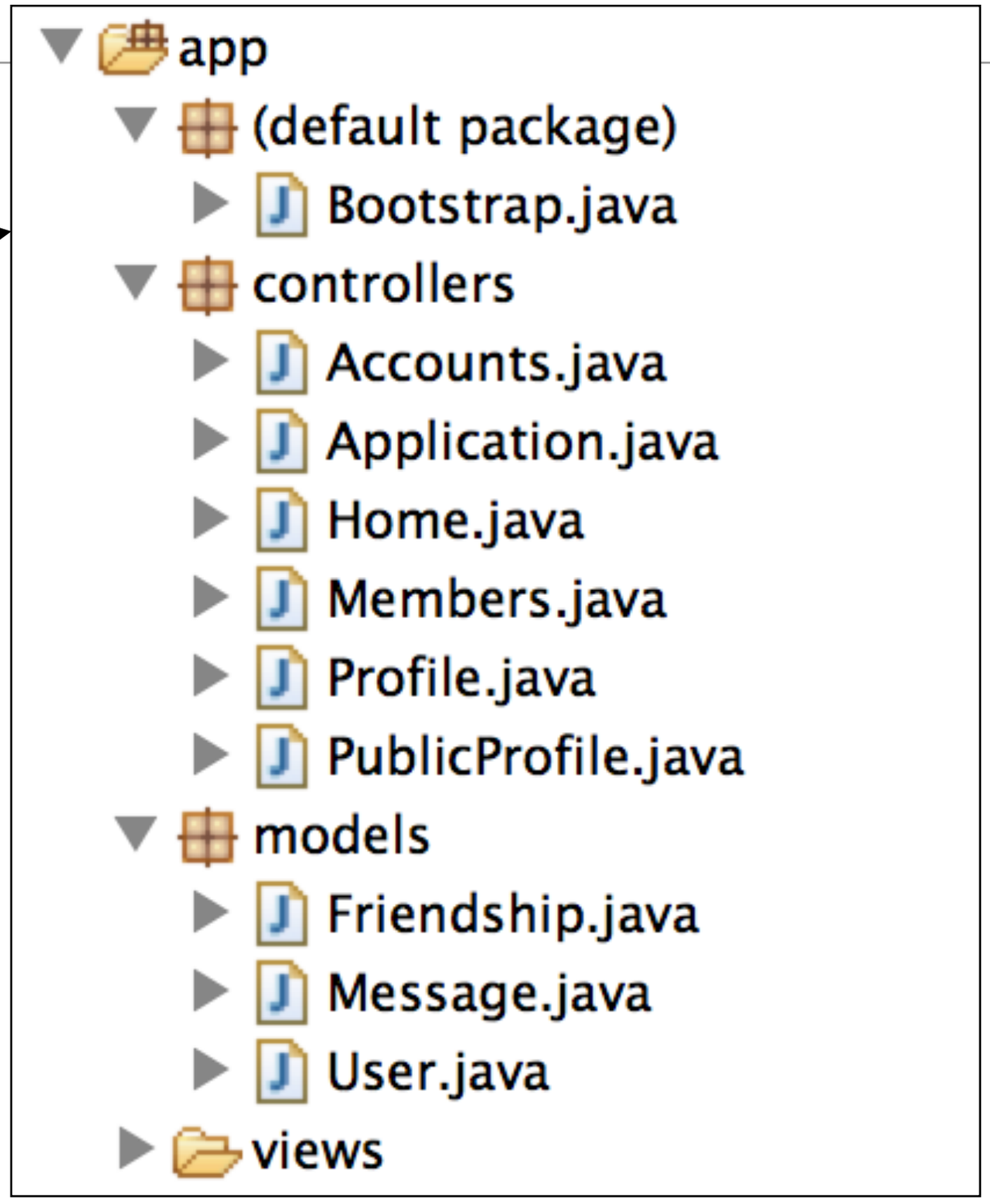
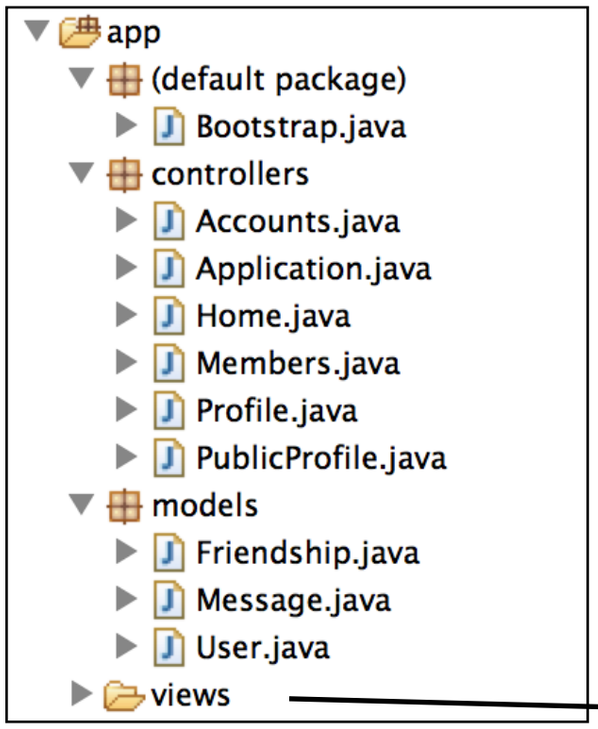

app
(default package)
Bootstrap.java
controllers
Accounts.java
Application.java
Home.java
Members.java
Profile.java
PublicProfile.java
models
Friendship.java
Message.java
User.java
views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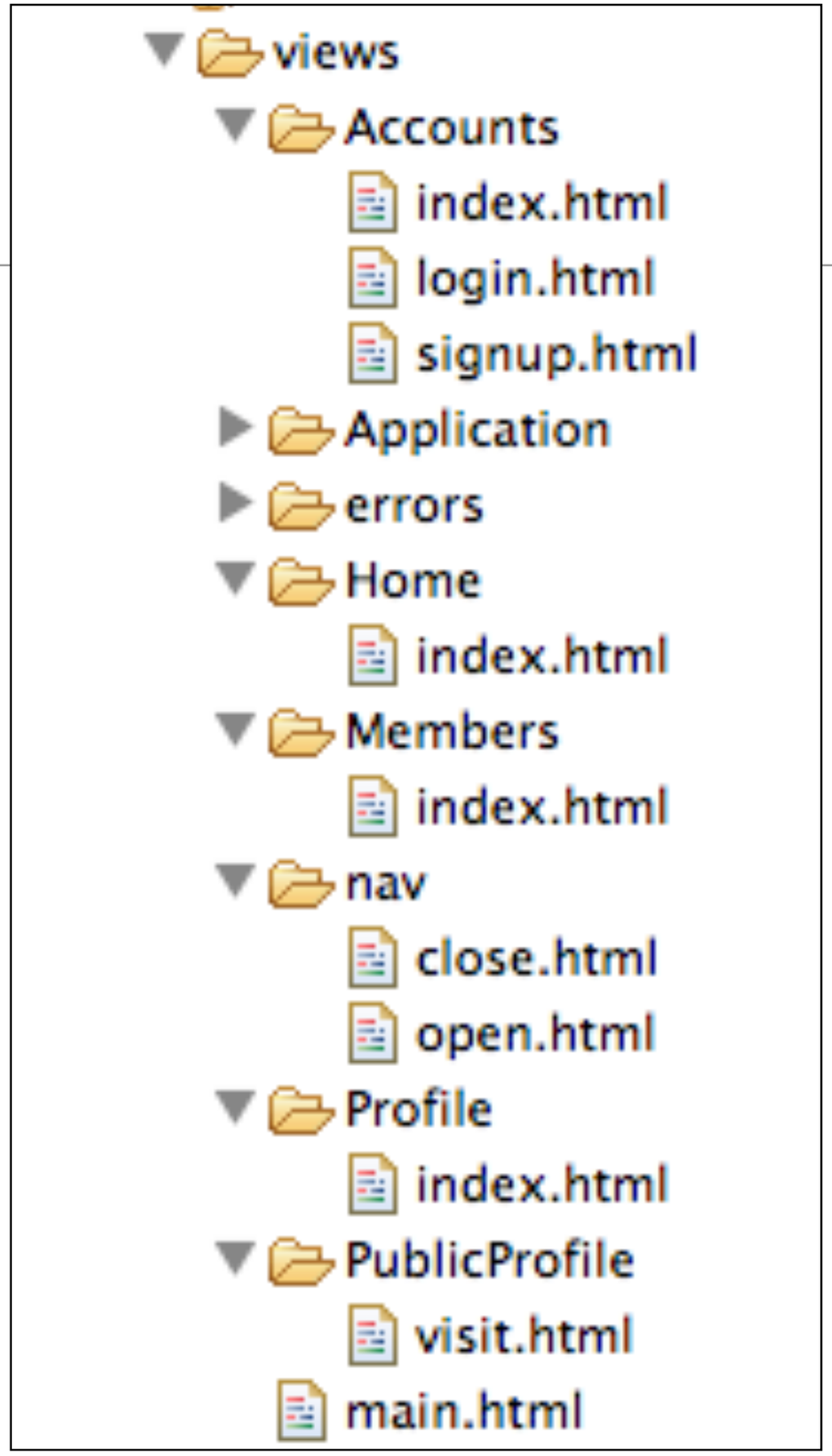
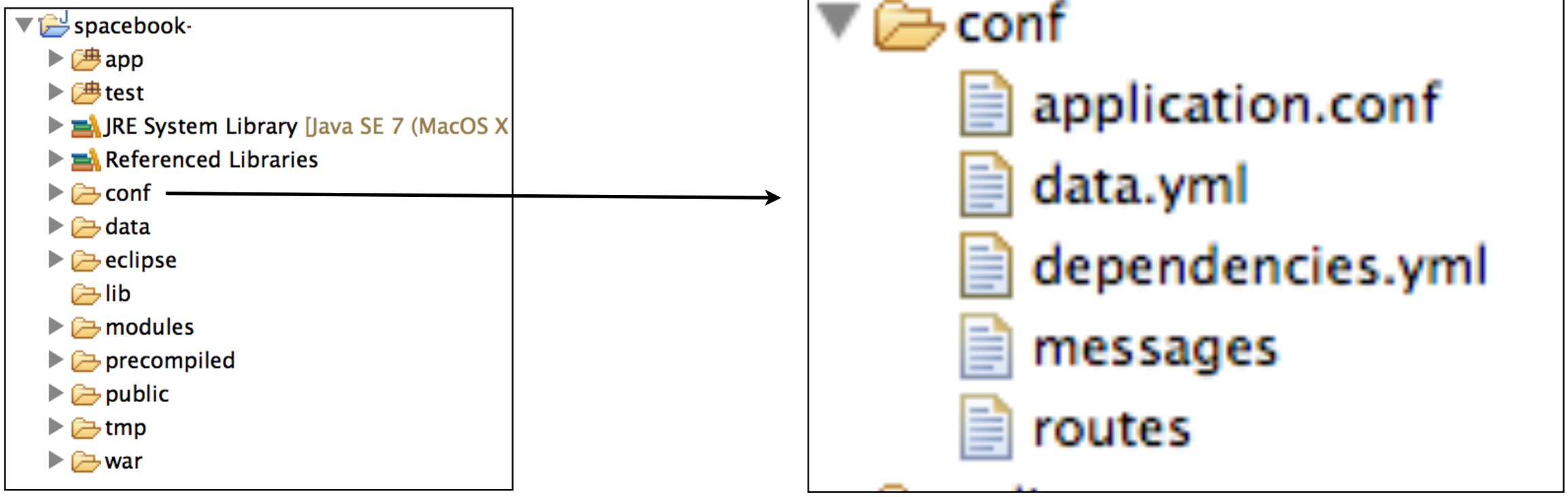

views
Accounts
index.html
login.html
signup.html
Application
errors
Home
index.html
Members
index.html
nav
close.html
open.html
Profile
index.html
PublicProfile
visit.html
main.html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data
eclipse
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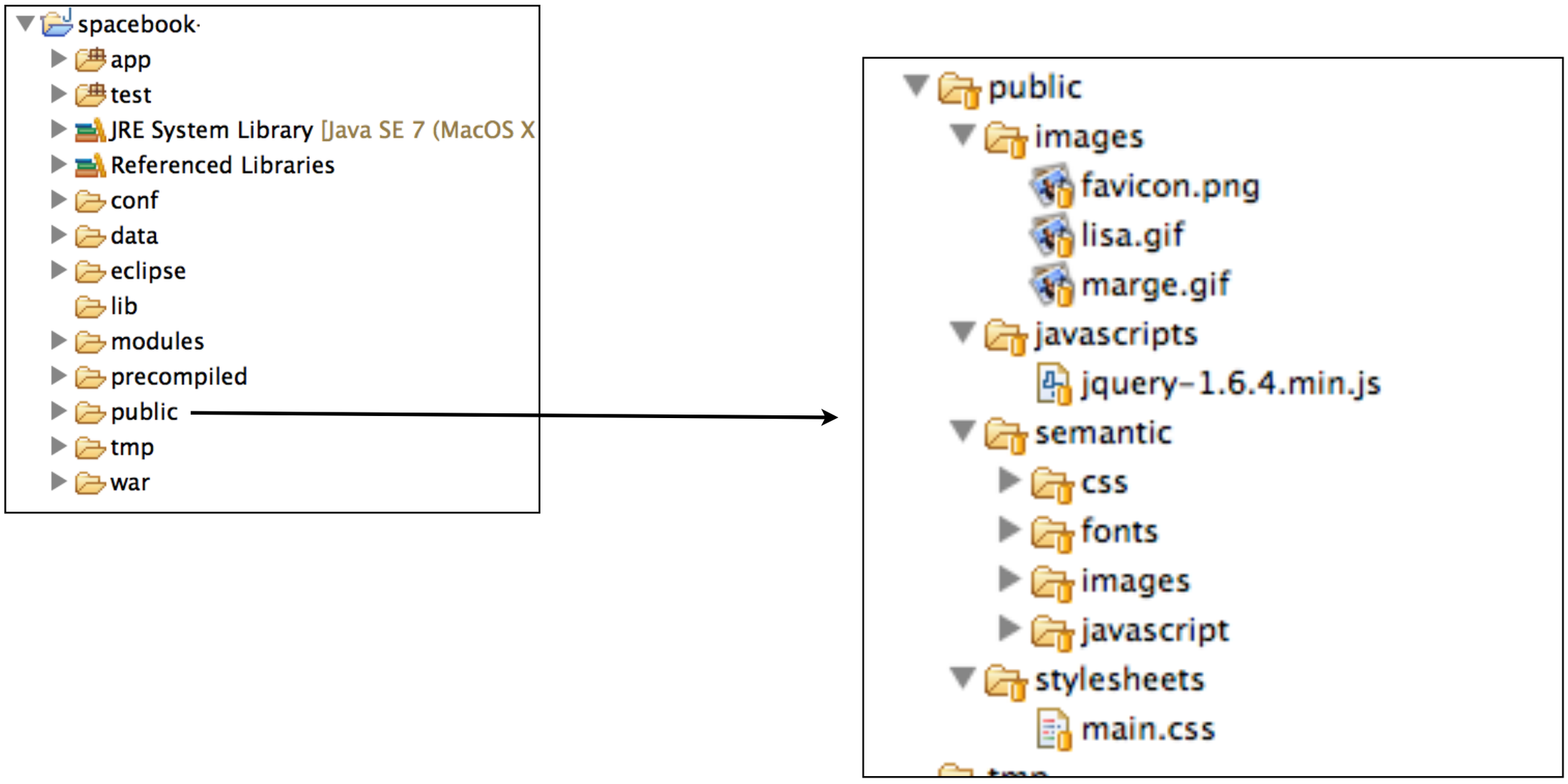
public
tmp
war
conf
application.conf
data.yml
dependencies.yml
messages
routes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conf
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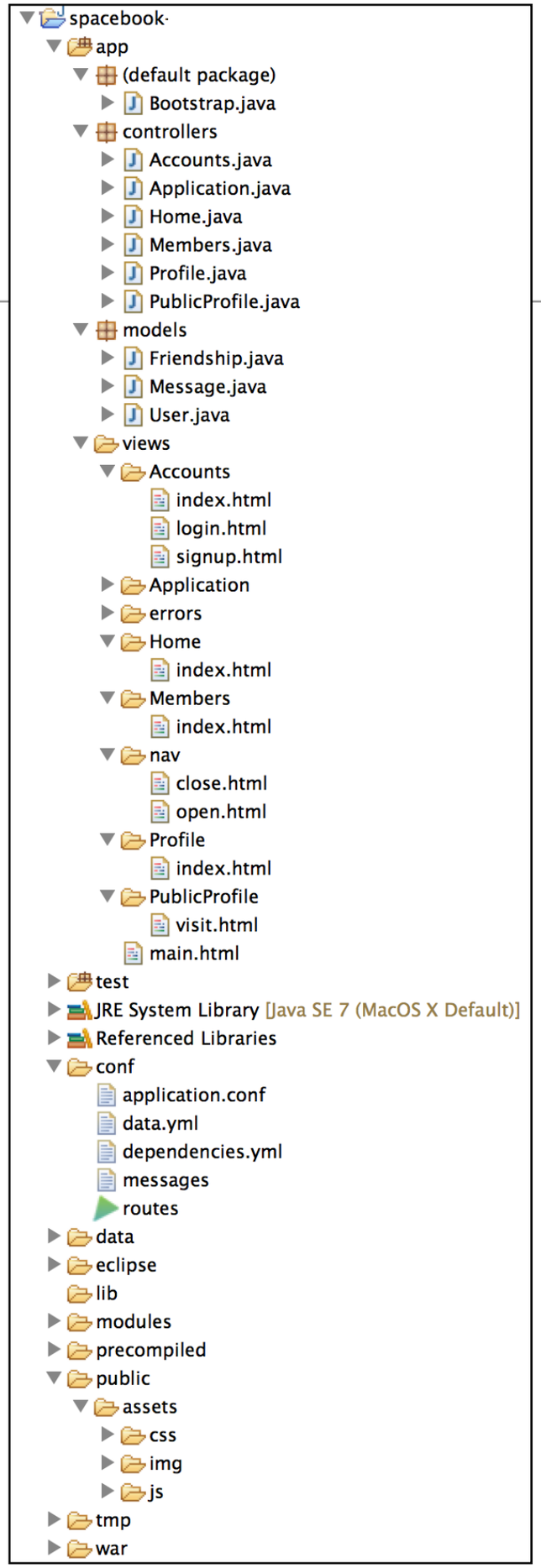
public
tmp
war
public
images
favicon.png
lisa.gif
marge.gif
javascripts
jquery-1.6.4.min.js
semantic
css
fonts
images
javascript
stylesheets
main.css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