

Application Development & Modelling

BSc in Applied Computing

Produced
by

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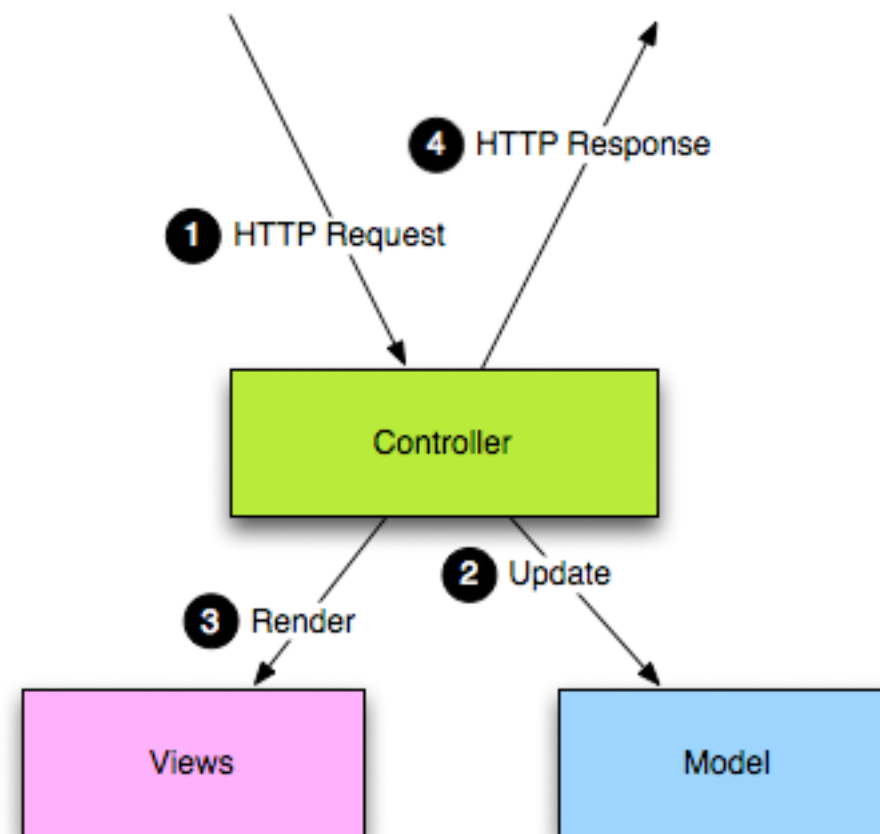


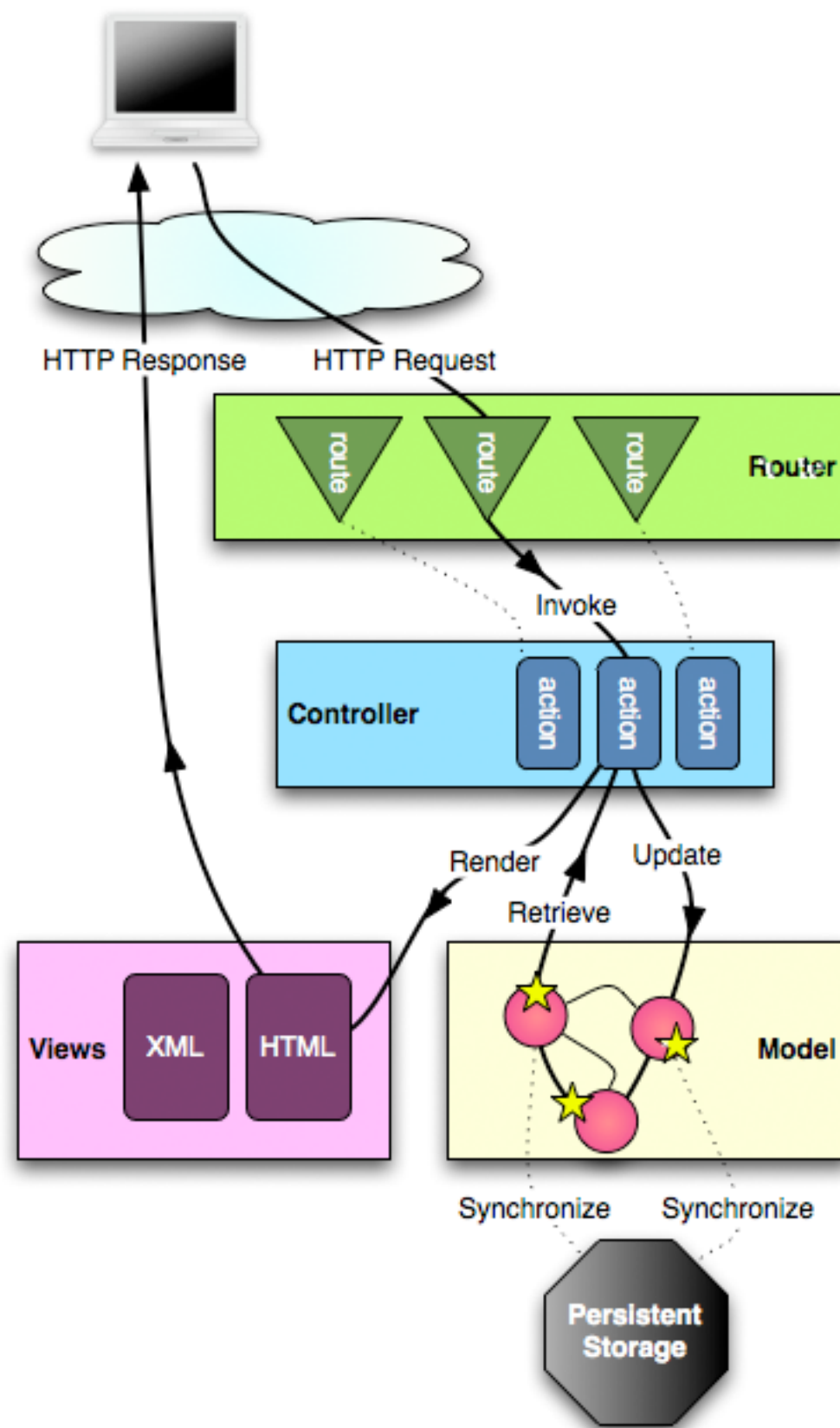
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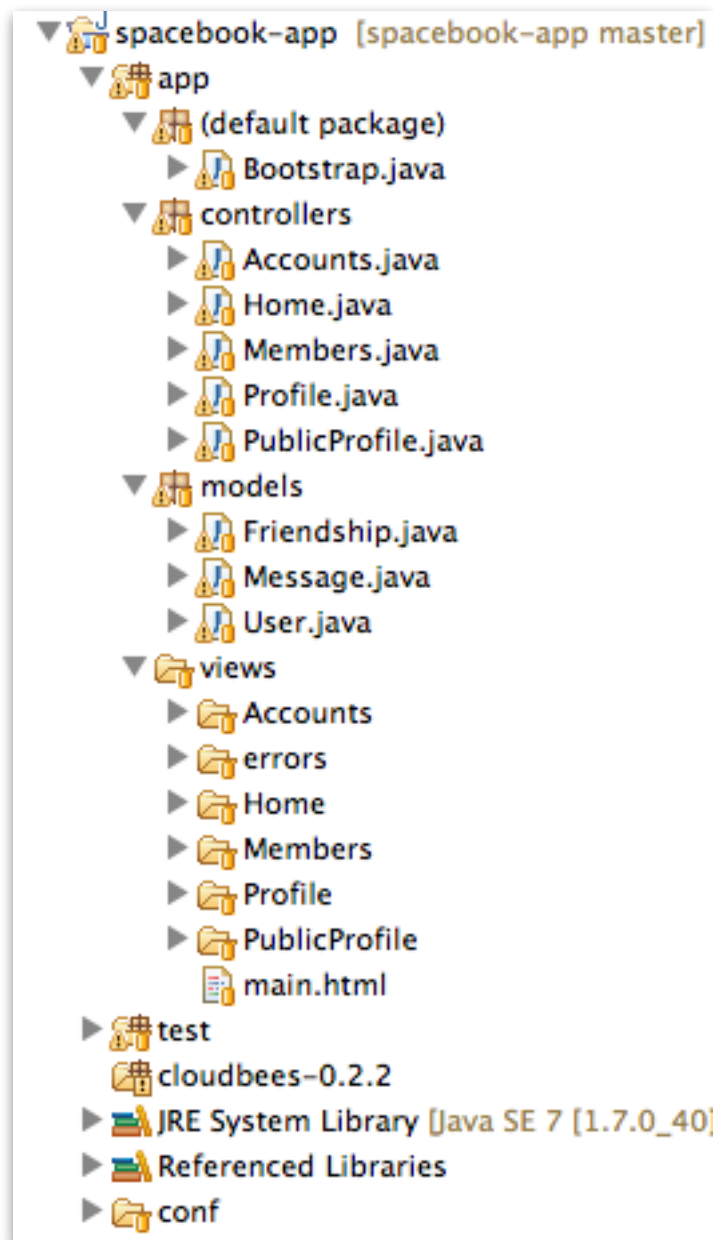
Play Application Structure

HTTP Request/Response Cycle



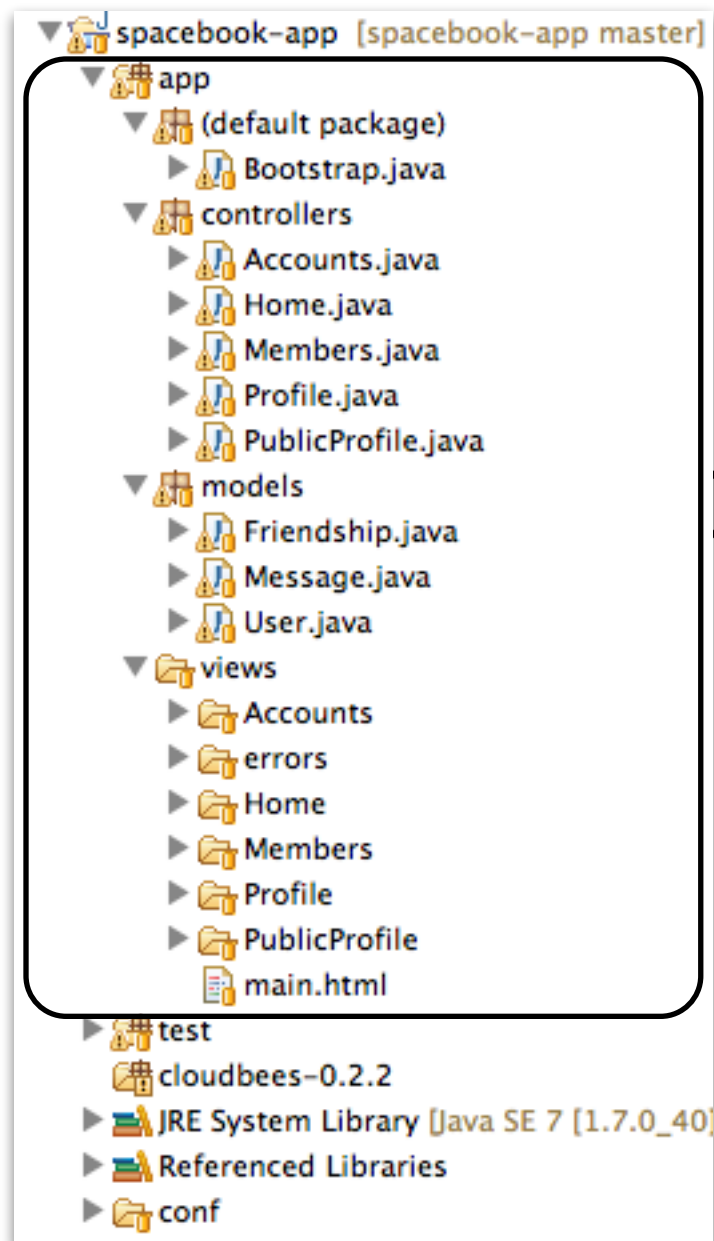


Play Project Structure



- All Play projects have a very specific structure.
- This structure ensures that there is a consistent *separation of concerns*
- This ensures a clear distinction in the project structure between views, models and controllers.
- Views are expressed in HTML + a simple 'template' language
- Controllers and Models are in standard Java

Play Project Structure



- Application 'sources', where most of the development effort takes place
- In a folder called 'app'
- In turn divided into three folders:
 - controllers
 - models
 - views

Controllers



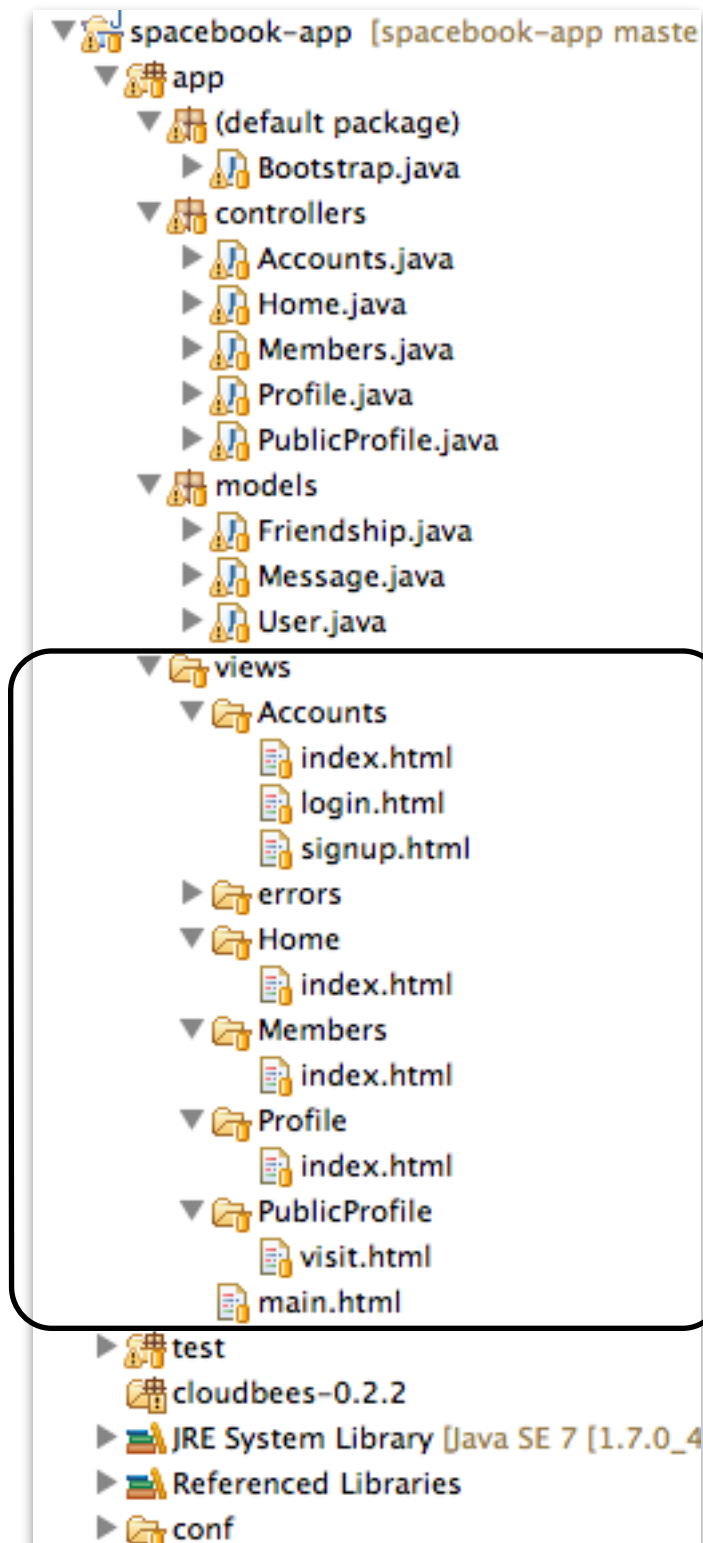
- Controllers accept all HTTP ‘requests’
- Requests are initiated by user:
 - placing url in browser address bar
 - clicking on a link
 - submitting a form
- Requests result in methods in controllers being called
- These methods are called “Actions”

Models



- Any information that must be 'remembered' will be part of the model
- For spacebook, this might include user details, names, passwords, messages, profile status images etc...
- Instances of these classes will be saved to a database

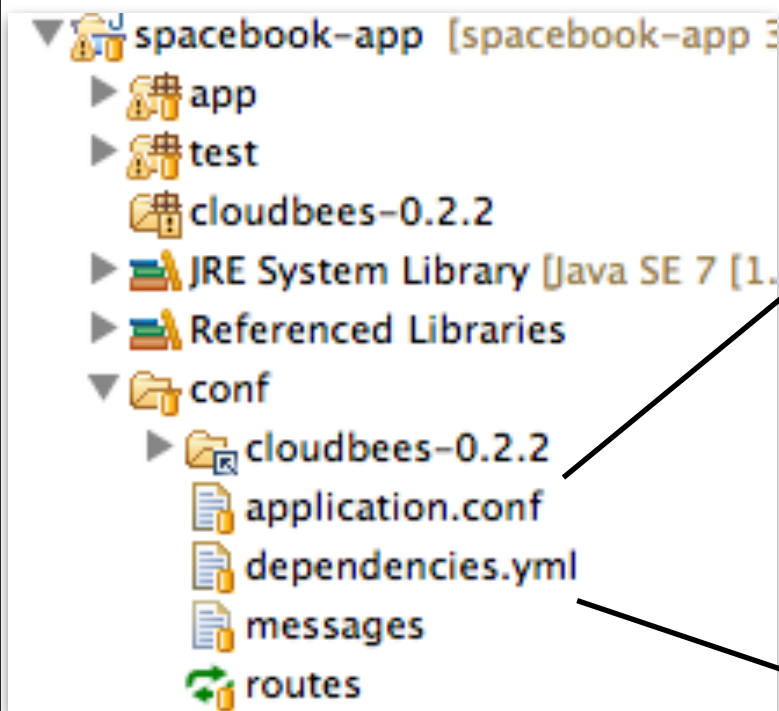
Views



- Fragments of HTML pages
- Usually modelled on a 'template' - main.html in this project
- main.html defines a top level structure for a complete page
- Individual aspects of the main.html template are replaced as needed to deliver a complete 'view'
- Page fragments contain HTML + a simple template language

Conf

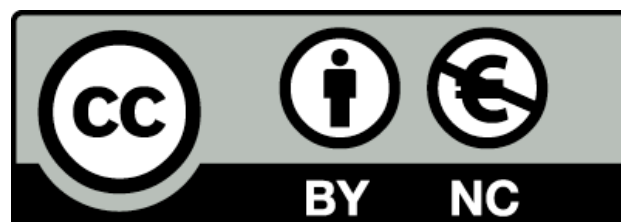
- Configuration parameters for the entire application
- Not Java, Not HTML, Not template language



- Various Application Settings, including
 - application name
 - Java version
 - Cloudbees credentials (security, password etc..)
 - Database configuration
 - etc

- External Modules used (eg. cloudbees deployment)

- Application Routes
 - Route Pattern -> Java Action



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