Design Patterns

MSc in Communications Software

Produced by

Eamonn de Leastar (edeleastar@wit.ie)

Department of Computing, Maths & Physics

Waterford Institute of Technology

http://www.wit.ie

http://elearning.wit.ie

Waterford Institute *of* Technology
INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

eLearning
support unit

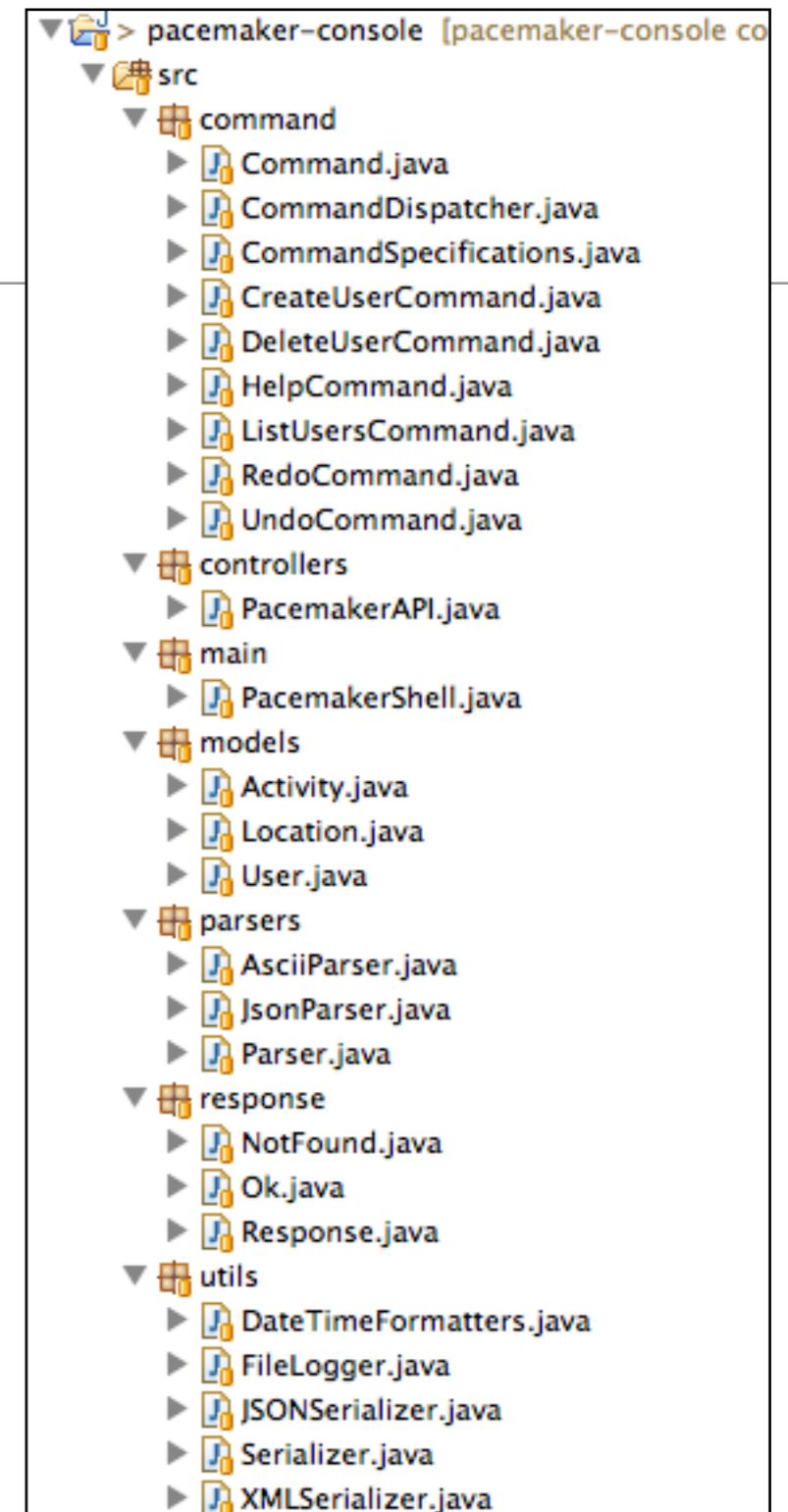# Pacemaker Command

pacemaker-console

- Limited command set:

  - Create User

  - Delete User

  - List Users

  - Undo

  - Redo

```
pacemaker-console [pacemaker-console co
src
  command
    Command.java
    CommandDispatcher.java
    CommandSpecifications.java
    CreateUserCommand.java
    DeleteUserCommand.java
    HelpCommand.java
    ListUsersCommand.java
    RedoCommand.java
    UndoCommand.java
  controllers
    PacemakerAPI.java
  main
    PacemakerShell.java
  models
    Activity.java
    Location.java
    User.java
  parsers
    AsciiParser.java
    JsonParser.java
    Parser.java
  response
    NotFound.java
    Ok.java
    Response.java
  utils
    DateTimeFormatters.java
    FileLogger.java
    JSONSerializer.java
    Serializer.java
    XMLSerializer.java
```

```
Welcome to pacemaker-console - ?help for instructions
pm> help
[delete-user, help, undo, list-users, redo, create-user]
pm>
pm>
```

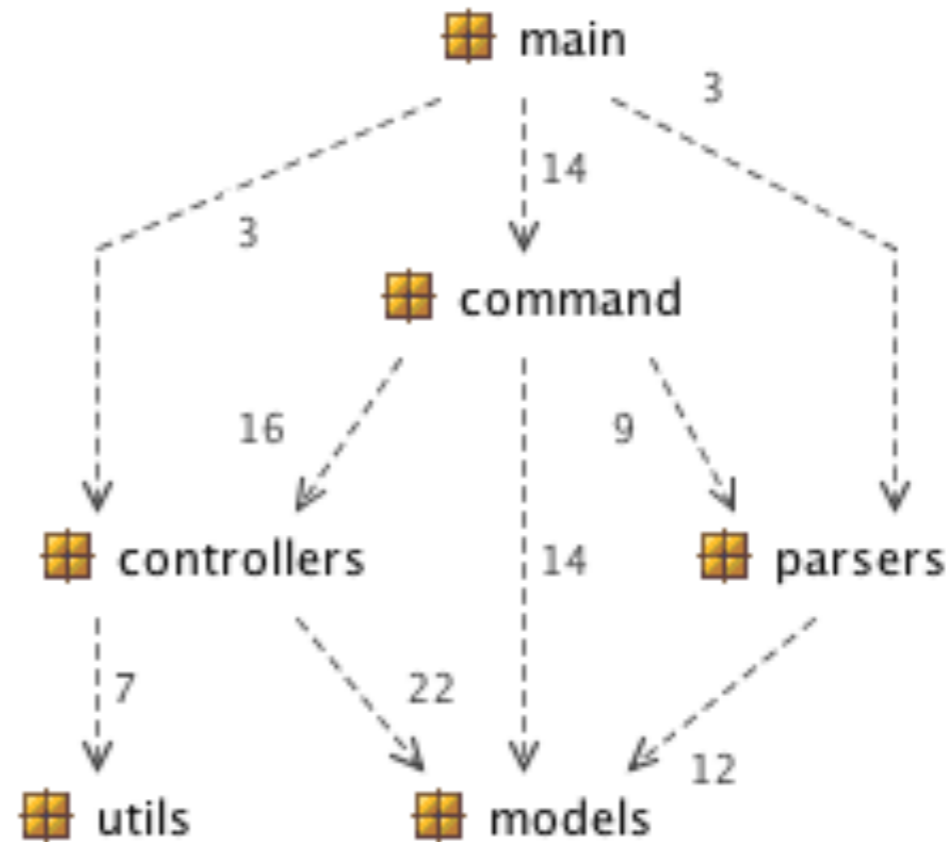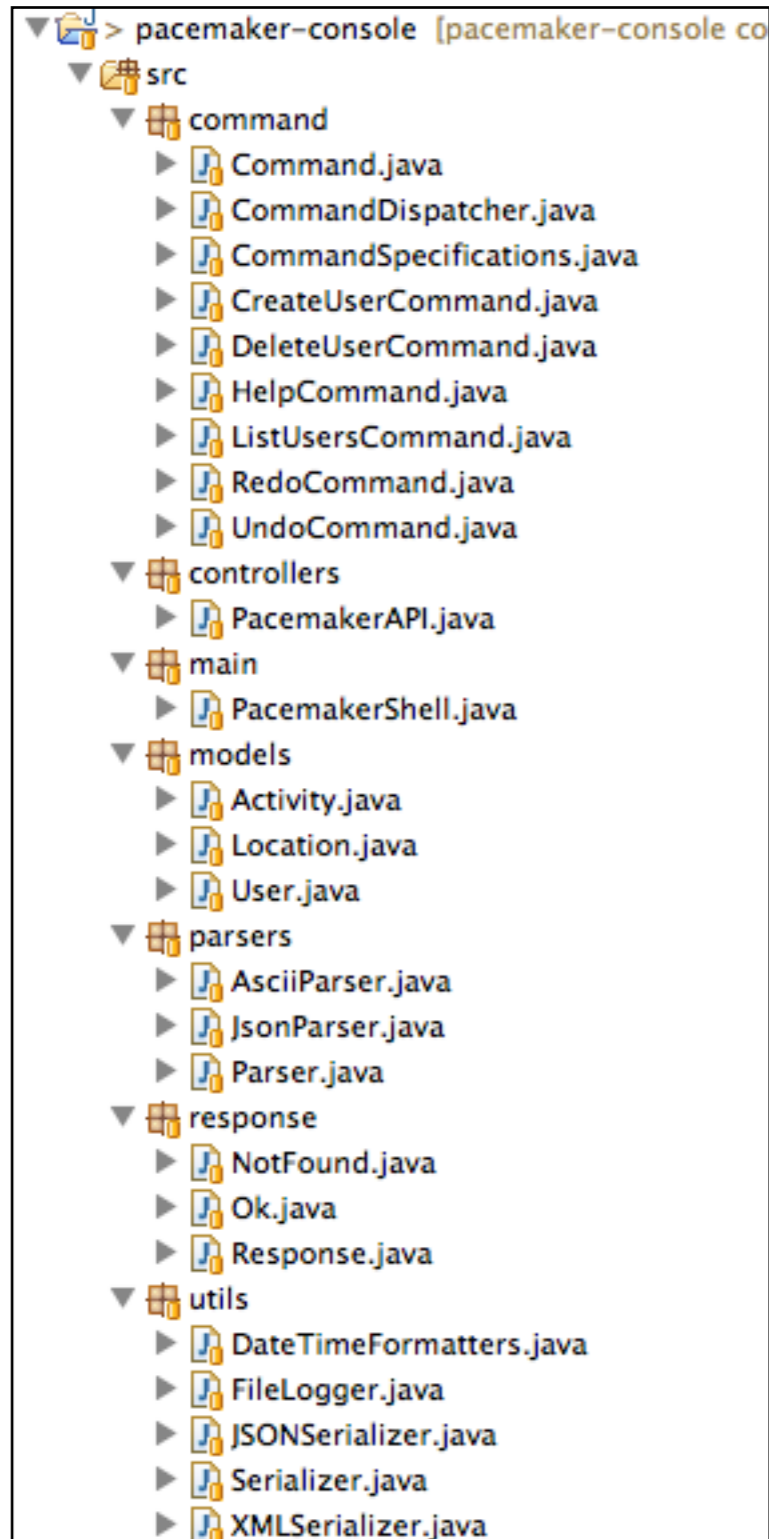# Transcript

- Create User

- Delete User

- List Users

```
Welcome to pacemaker-console - ?help for instructions
pm> help
[delete-user, help, undo, list-users, redo, create-user]
pm>
pm> cu homer simpson homer@simpsin.com secret
+----+-----------+----------+--------------------+----------+
| ID | FIRSTNAME | LASTNAME |       EMAIL        | PASSWORD |
+----+-----------+----------+--------------------+----------+
| 1  |     homer |  simpson | homer@simpsin.com  |   secret |
+----+-----------+----------+--------------------+----------+
pm> cu marge simpson marge@simpson.com secret
+----+-----------+----------+--------------------+----------+
| ID | FIRSTNAME | LASTNAME |       EMAIL        | PASSWORD |
+----+-----------+----------+--------------------+----------+
| 2  |     marge |  simpson | marge@simpson.com  |   secret |
+----+-----------+----------+--------------------+----------+
pm> lu
+----+-----------+----------+--------------------+----------+
| ID | FIRSTNAME | LASTNAME |       EMAIL        | PASSWORD |
+----+-----------+----------+--------------------+----------+
| 1  |     homer |  simpson | homer@simpsin.com  |   secret |
| 2  |     marge |  simpson | marge@simpson.com  |   secret |
+----+-----------+----------+--------------------+----------+
pm> du 1
pm> lu
+----+-----------+----------+--------------------+----------+
| ID | FIRSTNAME | LASTNAME |       EMAIL        | PASSWORD |
+----+-----------+----------+--------------------+----------+
| 2  |     marge |  simpson | marge@simpson.com  |   secret |
+----+-----------+----------+--------------------+----------+
pm>
```
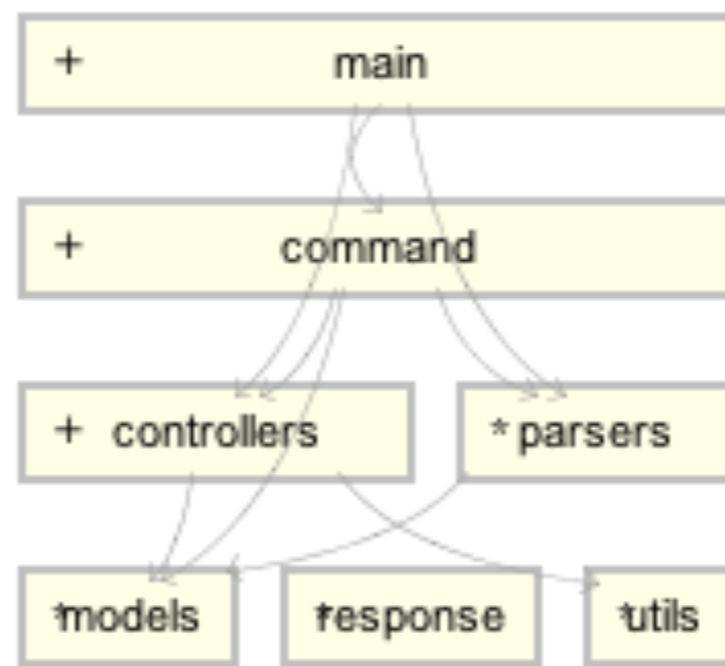
Transcript (with undo/redo)

- undo

- redo

```
Welcome to pacemaker-console - ?help for instructions
pm> cu homer simpson homer@simpsin.com secret
+----+-----------+----------+-------------------+----------+
| ID | FIRSTNAME | LASTNAME |       EMAIL       | PASSWORD |
+----+-----------+----------+-------------------+----------+
|  1 |     homer |  simpson | homer@simpsin.com |   secret |
+----+-----------+----------+-------------------+----------+
pm> cu marge simpson marge@simpsin.com secret
+----+-----------+----------+-------------------+----------+
| ID | FIRSTNAME | LASTNAME |       EMAIL       | PASSWORD |
+----+-----------+----------+-------------------+----------+
|  2 |     marge |  simpson | marge@simpsin.com |   secret |
+----+-----------+----------+-------------------+----------+
pm> lu
+----+-----------+----------+-------------------+----------+
| ID | FIRSTNAME | LASTNAME |       EMAIL       | PASSWORD |
+----+-----------+----------+-------------------+----------+
|  1 |     homer |  simpson | homer@simpsin.com |   secret |
|  2 |     marge |  simpson | marge@simpsin.com |   secret |
+----+-----------+----------+-------------------+----------+
pm> undo
pm> lu
+----+-----------+----------+-------------------+----------+
| ID | FIRSTNAME | LASTNAME |       EMAIL       | PASSWORD |
+----+-----------+----------+-------------------+----------+
|  1 |     homer |  simpson | homer@simpsin.com |   secret |
+----+-----------+----------+-------------------+----------+
pm> undo
pm> lu
pm> redo
pm> lu
+----+-----------+----------+-------------------+----------+
| ID | FIRSTNAME | LASTNAME |       EMAIL       | PASSWORD |
+----+-----------+----------+-------------------+----------+
|  3 |     homer |  simpson | homer@simpsin.com |   secret |
+----+-----------+----------+-------------------+----------+
pm> redo
pm> lu
+----+-----------+----------+-------------------+----------+
| ID | FIRSTNAME | LASTNAME |       EMAIL       | PASSWORD |
+----+-----------+----------+-------------------+----------+
|  3 |     homer |  simpson | homer@simpsin.com |   secret |
|  4 |     marge |  simpson | marge@simpsin.com |   secret |
+----+-----------+----------+-------------------+----------+
pm>
```
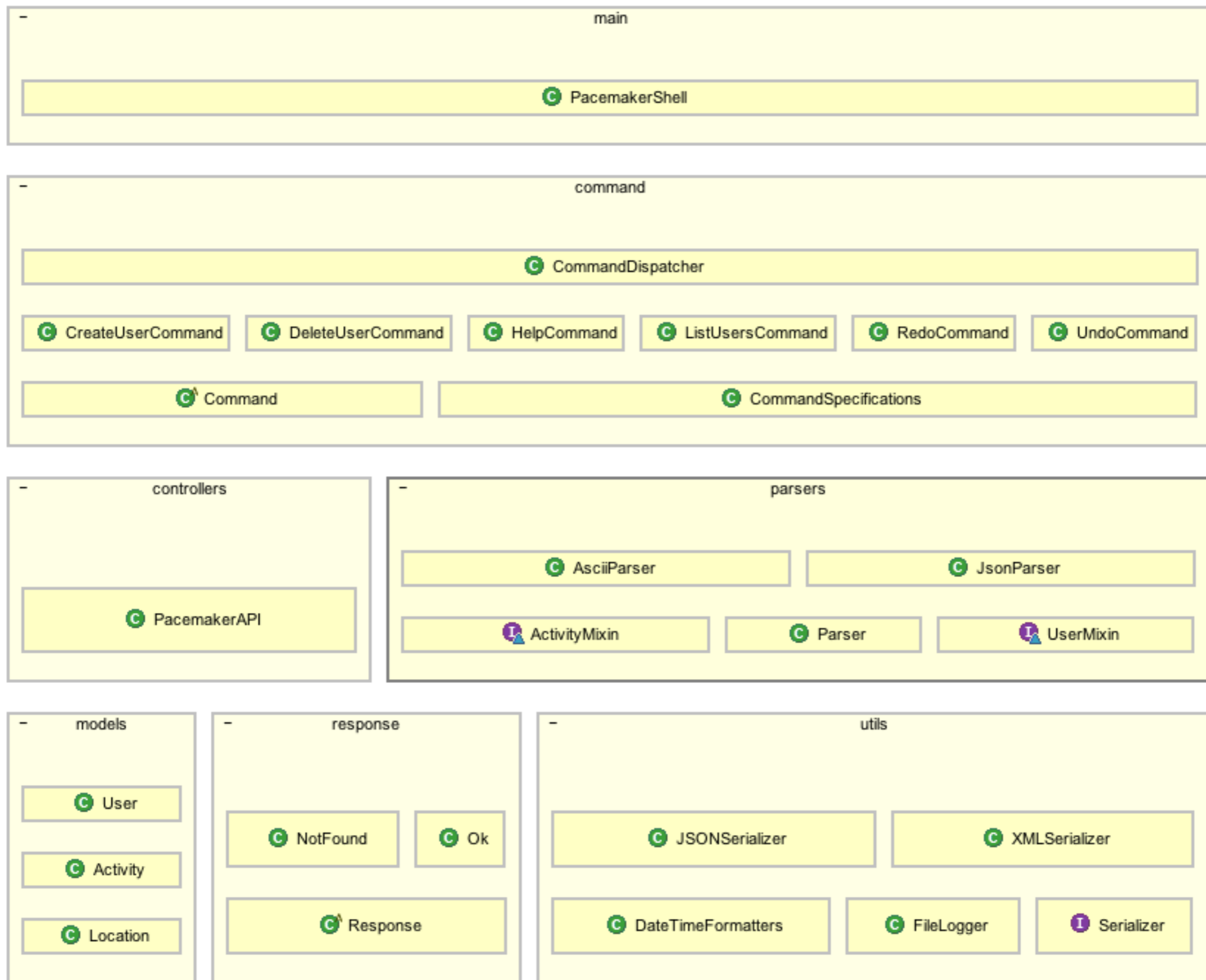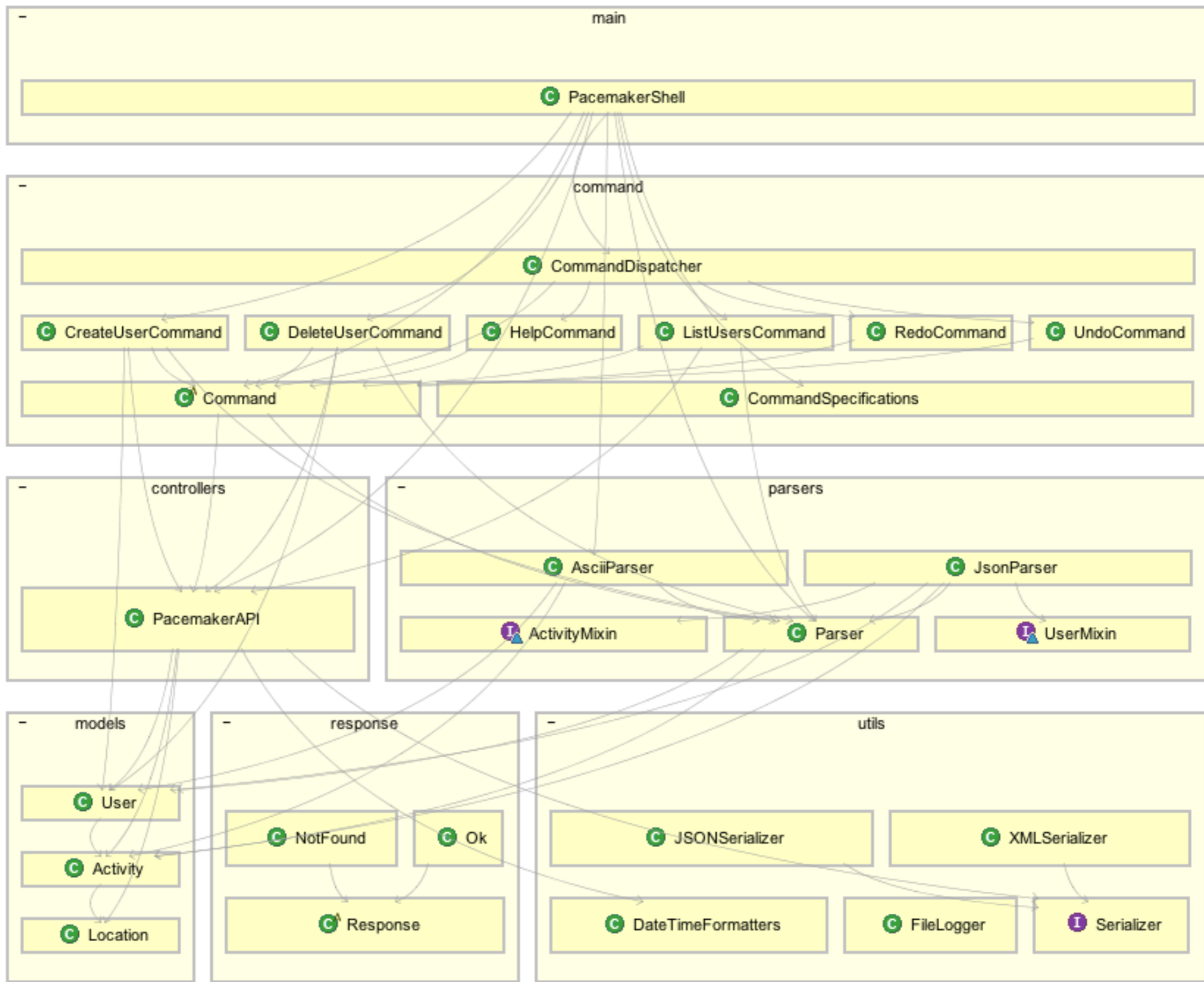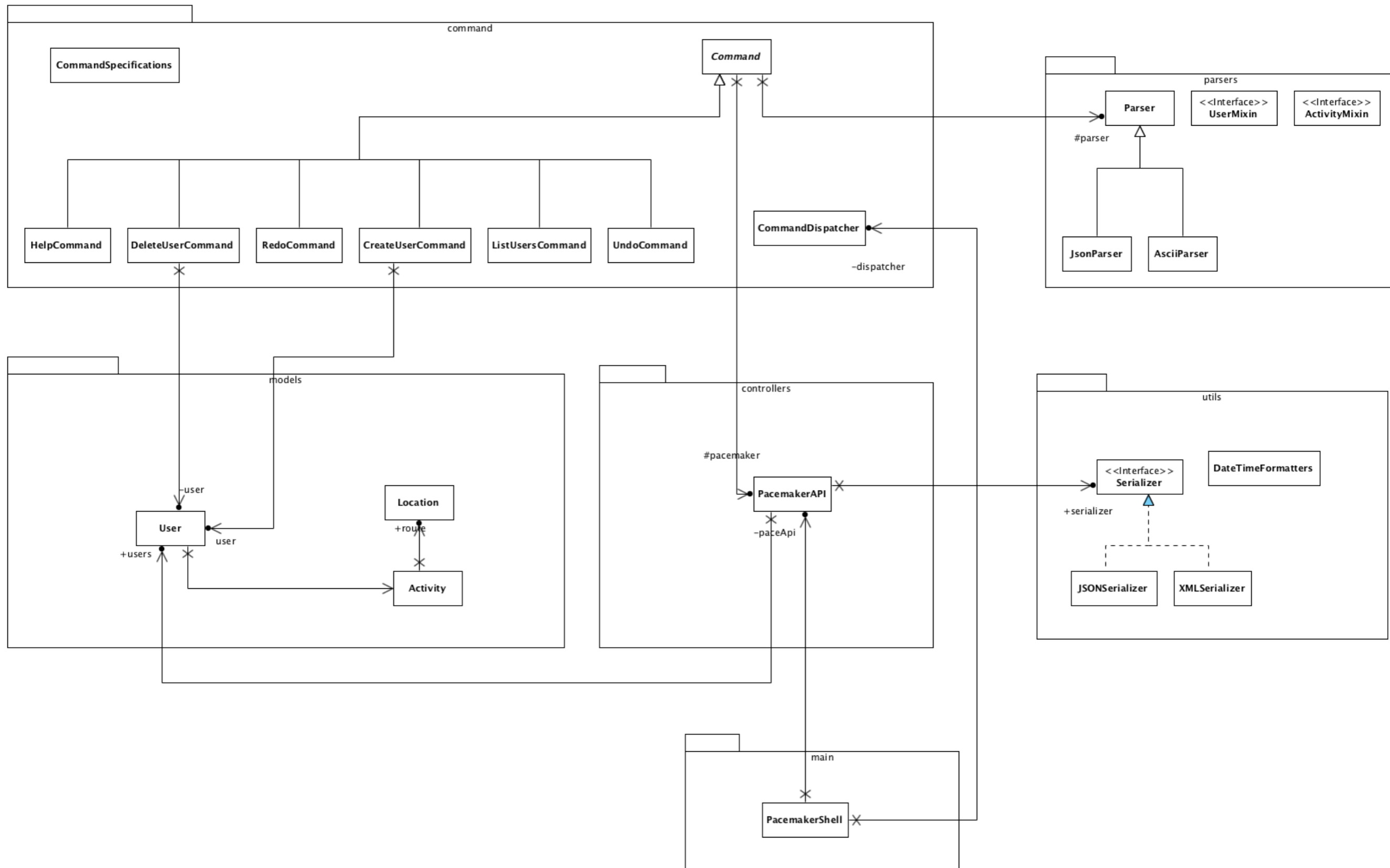
Architecture

*Headway Structure 101

main

C PacemakerShell

command

C CommandDispatcher

C CreateUserCommand **C** DeleteUserCommand **C** HelpCommand **C** ListUsersCommand **C** RedoCommand **C** UndoCommand

C Command **C** CommandSpecifications

controllers

C PacemakerAPI

parsers

C AsciiParser **C** JsonParser

I ActivityMixin **C** Parser **I** UserMixin

models

C User

C Activity

C Location

response

C NotFound **C** Ok

C Response

utils

C JSONSerializer **C** XMLSerializer

C DateTimeFormatters **C** FileLogger **I** Serializer

main

PacemakerShell

command

CommandDispatcher

CreateUserCommand   DeleteUserCommand   HelpCommand   ListUsersCommand   RedoCommand   UndoCommand

Command   CommandSpecifications

controllers

PacemakerAPI

parsers

AsciiParser   JsonParser

ActivityMixin   Parser   UserMixin

models

User

Activity

Location

response

NotFound   Ok

Response

utils

JSONSerializer   XMLSerializer

DateTimeFormatters   FileLogger   Serializer

*Headway Structure 101

*UML

Waterford Institute *of* Technology
INSTITIÚID TEICNEOLAÍOCHTA PHORT LÁIRGE

eLearning
support unit