Chat

# Stack

jQuery

backboneJS

underscore.js

socket.io

**Client (browser)**

backbone.iobind.js

websocket.js

(polyfill websocket)

**chat.js**

node.js

socket.io

express

mongoose

**Server**

MongoDB

Redis

**app.js**

**WebSocket**

**HTTP**

# Architecture

node

http

websocket

MongoDB

Redis

iOS

Android

Windows Phone

Home

Profiles

(room, user)

Chat

User account

Backend

Web

Mobile

# Client Server communication (old)

|  |  |  |  |
| --- | --- | --- | --- |
| Message | Direction | Params | Comment |
| connect | C->S |  |  |
| close | C->S |  |  |
| subscribe | C->S |  |  |
| unsubscribe | C->S |  |  |
| publish | C->S |  |  |
| createRoom | C->S |  |  |
| changeBaseline | C->S |  |  |
| searchForRooms | C->S |  |  |
| searchForUsers | C->S |  |  |
|  |  |  |  |
| connect | S->C |  |  |
| disconnect | S->C |  |  |
| subscribeSuccess | S->C |  |  |
| subscribeError | S->C |  |  |
| openRoom | S->C |  |  |
| closeRoom | S->C |  |  |
| leftRoom | S->C |  |  |
| message | S->C |  |  |
| addRoomAttendee | S->C |  |  |
| userEnterInRoom | S->C |  |  |
| userOutRoom | S->C |  |  |
| roomBaseline | S->C |  |  |
| pleaseJoinRoom | S->C |  |  |
| pleaseLeaveRoom | S->C |  |  |
| newOnlineUser | S->C |  |  |
| removeOnlineUser | S->C |  |  |
|  |  |  |  |

# Client Server communication (NEW)

|  |  |  |  |
| --- | --- | --- | --- |
| event | Direction | Params | Comment |
|  |  |  |  |
| connect | C->S |  |  |
| close | C->S |  |  |
| userIdentity | S->C |  |  |
| *handshake|welcome|connect* | S->C |  |  |
|  |  |  |  |
| room:: |  |  |  |
| joinSuccess | S->C | Contains room details and users |  |
| pleaseJoin | S->C |  |  |
| pleaseLeave | S->C |  |  |
| baseline | S->C |  |  |
| userIn | S->C |  |  |
| userOut | S->C |  |  |
| join | C->S |  |  |
| leave | C->S |  |  |
| message | C->S |  |  |
| create | C->S |  |  |
| baseline | C->S |  |  |
| search | C->S |  |  |
| profile | AJAX |  |  |
|  |  |  |  |
| onetoone:: |  |  |  |
| messageForUser | C->S |  |  |
| messageFromUser |  |  |  |
|  |  |  |  |
| user:: |  |  |  |
| search | C->S |  |  |
| userOnline | S->C |  |  |
| userOffline | S->C |  |  |
| profile | AJAX |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# APP PAGES

|  |  |  |  |
| --- | --- | --- | --- |
|  | Method |  |  |
| / | GET | Page |  |
| /signup | (GET|POST) | Page |  |
| /login | (GET|POST) | Page + Modal |  |
| /forgot | (GET|POST) |  |  |
| /user/{NAME} | GET | Page + Modal |  |
| /user/{NAME}/edit | (GET|POST) | Modal |  |
|  |  |  |  |
| /room/{NAME} | GET | Page + Modal |  |
| /room/{NAME}/edit | (GET|POST) | Modal |  |
|  |  |  |  |
| /chat#{ROUTE} | GET | Page |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Models

|  |  |  |  |
| --- | --- | --- | --- |
|  | Client | Server |  |
| User:: |  |  |  |
| \_id |  |  |  |
| email |  |  |  |
| username |  |  |  |
| password |  |  |  |
| avatar |  |  |  |
| bio |  |  |  |
| location |  |  |  |
| website |  |  |  |
| time\_created |  |  |  |
| time\_logged |  |  |  |
| time\_updated |  |  |  |
|  |  |  |  |
| Room:: |  |  |  |
| \_id |  |  |  |
| name |  |  |  |
| description |  |  |  |
| rules |  |  |  |
| baseline |  |  |  |
| permanent |  |  |  |
| private |  |  |  |
| time\_created |  |  |  |
| time\_updated |  |  |  |
|  |  |  |  |
| Connection:: |  |  |  |
| \_id |  |  |  |
| user\_id |  |  |  |
| room\_id |  |  |  |
| time |  |  |  |
|  |  |  |  |
| Message:: |  |  |  |
| user\_id |  |  |  |
| room\_id |  |  |  |
| time |  |  |  |
| message |  |  |  |
|  |  |  |  |
| Message:: |  |  |  |
| user\_id |  |  |  |
| to\_user\_id |  |  |  |
| time |  |  |  |
| message |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# BACKBONE

« The layers are : **Server** communication, **Model** and **View**.

The **Model** bind the **Server.**

The **View** bind the **Model**.

The View bind the **User** actions. »

**Server**

**Model**

**Views**

**Collection**

**Bind**

**Trigger**

# Samples

* Entities
  + Users
    - Damien
    - David
    - Lili
    - Elio
    - Elvire
    - <from log>
  + Rooms
    - <from log>
* Activity
  + User connect (random 50%)
    - User join room (random)
    - User leave room (random)
    - User message (random)
    - User one to one to static users (random)
    - User disconnect (random 5%)

Content : <http://mg.pov.lt/maemo-meeting-irclog/index.html>