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

|  |  |  |  |
| --- | --- | --- | --- |
| **direction** | **event** | **data** | **description** |
| C->S | *[connect]* |  |  |
| C->S | *[close]* |  |  |
| S->C | welcome | {  username: *username*,  avatar: *avatar*,  rooms : *[Room]*  } |  |
|  |  |  |  |
|  |  |  |  |
| S->C | room::joinSuccess | {  name: *name*,  topic: *topic,*  users: *[User]*  } |  |
| S->C | room::pleaseJoin |  |  |
| S->C | room::pleaseLeave |  |  |
| S->C | room::baseline |  |  |
| S->C | room::userIn |  |  |
| S->C | room::userOut |  |  |
| C->S | room::join |  |  |
| C->S | room::leave |  |  |
| C->S | room::message |  |  |
| C->S | room::create |  |  |
| C->S | room::baseline |  |  |
| C->S | room::search |  |  |
| AJAX | room::profile |  |  |
|  |  |  |  |
|  |  |  |  |
| C->S | message::messageForUser |  |  |
|  | message::messageFromUser |  |  |
|  |  |  |  |
|  | user:: |  |  |
| C->S | search |  |  |
| S->C | userOnline |  |  |
| S->C | userOffline |  |  |
| AJAX | profile |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# 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>