A7: High-level architecture. Privileges. Web resources specification

The architecture of the web application to develop is documented indicating the catalogue of resources and the properties of each resource, including: references to the graphical interfaces, and the format of JSON responses. This page presents a documentation for EventSS, including the following operations over data: create, read, update, and delete.

# Overview

An overview of the web application to implement is presented in this section, where the modules are identified and briefly described. The web resources associated with each module are detailed in the individual documentation of each module.

|  |  |
| --- | --- |
| M01: Authentication | Web resources associated with user authentication, includes the following system features: login/logout, registration and credential recovery. |
| M02: Users | Web resources associated with users and their individual profile management, including view and edit personal information, add friends, user search and notifications. |
| M03: Events | Web resources associated with events such as CRUD actions on an event, search events, invite and remove participants and CRUD posts. |
| M04: Administration | Web resources associated with administration such as view and ban users. |
| M05: Static Pages | Web resources associated with static pages, such as about page and 404 page. |

# Permissions

This section defines the permissions used in the modules to establish the conditions of access to resources.

|  |  |  |
| --- | --- | --- |
| PUB | Public | Group of users without privileges. |
| USR | User | Authenticated user that can update their profiles and create or join events. |
| OWN | Owner | Group of users that have privileges regarding their events. |
| PRT | Participant | Group of users that can rate and create posts on the event they’ve been at. |
| ADM | Administration | Group of administrators. |

# Modules

This section documents each web resource of each module, indicating the URL, HTTP methods, the possible parameters, interfaces with the user (referring to the A3 artefact) — or JSON responses in the event of APIs.

Module M01: Authentication

Endpoints of Module Authentication:

These are the endpoints available in the Authentication.

* R101: Login Form /login
* R102: Login Action /login
* R103: Register Form /register
* R104: Register Action /register
* R105: Logout Action /logout

R101: Login Form

|  |  |
| --- | --- |
| URL | /login |
| Description | Form to login to a user account. |
| Method | GET |
| UI | [UI01](https://quaresma1997.github.io/lbaw1765/) |
| SUBMIT | R102 |
| Permissions | PUB |

R102: Login Action

|  |  |  |
| --- | --- | --- |
| URL | /login | |
| Description | This web resource logs the user into the system. Redirects to the authenticated homepage on success and stays on the public homepage with the login modal open on failure. | |
| Method | POST | |
| Request Body | +username: string | Username |
| +password: string | Password |
| Redirects | [/](https://quaresma1997.github.io/lbaw1765/homepage.html)homepage | Success |
| R101 | Fail |
| Permissions | PUB | |

R103: Register Form

|  |  |
| --- | --- |
| URL | /register |
| Description | Form to sign up a new user account. |
| Method | GET |
| UI | [UI02](https://quaresma1997.github.io/lbaw1765/) |
| SUBMIT | R104 |
| Permissions | PUB |

R104: Register Action

|  |  |  |
| --- | --- | --- |
| URL | /register | |
| Description | This web resource signs up the user into the system. Redirects to the authenticated homepage on success and stays on the public homepage with the sign up modal open on failure. | |
| Method | POST | |
| Request Body | ?username: string | Username |
| ?email: string | Email |
| ?first\_name: string | First Name |
| ?last\_name: string | Last Name |
| ?country: string | Country |
| ?city: string | City |
| ?password: string | Password |
| Redirects | [/](https://quaresma1997.github.io/lbaw1765/homepage.html)homepage | Success |
| R103 | Fail |
| Permissions | PUB | |

R105: Logout Action

|  |  |  |
| --- | --- | --- |
| URL | /logout | |
| Description | This web resource signs out the authenticated user or admin. | |
| Method | POST | |
| Redirects | [/](https://quaresma1997.github.io/lbaw1765/index.html)index | Success |
| Permissions | USR | |

Module M02: Users

Endpoints of Module Users:

These are the endpoints available in the Users.

* R201: View Profile /{username}
* R202: Edit Profile Form /{username}
* R203: Edit Profile Action /{username}
* R204: Add Friend Action /{username\_friend}
* R205: Accept Friend Action /
* R206: Remove Friend Action /{username\_friend}
* R207: View Notifications /
* R208: Search Users /search
* R209: Search Users API /search/q={username}
* R210: Delete Account Action /{username}

R201: View Profile

|  |  |  |
| --- | --- | --- |
| URL | /{username} | |
| Description | Shows the user individual profile page. | |
| Method | GET | |
| Parameters | +username: string | User username |
| UI | [profile](https://quaresma1997.github.io/lbaw1765/tiagoc.html) | |
| Permissions | USR | |

R202: Edit Profile Form

|  |  |  |
| --- | --- | --- |
| URL | /{username} | |
| Description | Form to edit the user information. | |
| Method | GET | |
| Parameters | +username: string | User username |
| UI | [profile](https://quaresma1997.github.io/lbaw1765/tiagoc.html) | |
| SUBMIT | R203 | |
| Permissions | PUB | |

R203: Edit Profile Action

|  |  |  |
| --- | --- | --- |
| URL | /{username} | |
| Description | This web resource updates the user information in the system. Redirects to the updated profile on success. | |
| Method | PUT | |
| Parameters | +username: string | User username |
| Request Body | ?image\_path: string | Image |
| ?first\_name: string | First Name |
| ?last\_name: string | Last Name |
| ?country: string | Country |
| ?city: string | City |
| ?password: string | Password |
| Redirects | R201 | Success |
| R202 | Fail |
| Permissions | USR | |

R204: Add Friend Action

|  |  |  |
| --- | --- | --- |
| URL | /{username\_friend} | |
| Description | Inserts a friend request into the system. | |
| Method | POST | |
| Parameters | +username\_friend: string | User friend username |
| Redirects | R201 | |
| Permissions | USR | |

R205: Accept Friend Action

|  |  |  |
| --- | --- | --- |
| URL | / | |
| Description | Inserts a friendship into the system. | |
| Method | POST | |
| Request Body | +user\_friend\_id: string | Users\_friends Primary key |
| Redirects | R201 | |
| Permissions | USR | |

R206: Remove Friend Action

|  |  |  |
| --- | --- | --- |
| URL | /{username\_friend} | |
| Description | This web resource removes a friendship from the system | |
| Method | DELETE | |
| Parameter | +username\_friend: string | Users\_friends username |
| Redirects | R201 | |
| Permissions | USR | |

R207: View Notifications

|  |  |
| --- | --- |
| URL | / |
| Description | Displays the user’s notifications such as friend’s activities, friendship requests and invites to events. |
| Method | GET |
| Permissions | USR |

R208: Search Users

|  |  |  |
| --- | --- | --- |
| URL | /search | |
| Description | Form to search users. | |
| Method | GET | |
| Parameters | +name: string | Username |
| UI | [UI15](https://quaresma1997.github.io/lbaw1765/searchLogged.html) | |
| AJAX Calls | R209 | |
| Permissions | USR | |

R209: Search Users API

|  |  |  |
| --- | --- | --- |
| URL | /search/?name={username} | |
| Description | This web resource searches the system for users and returns the results. | |
| Method | GET | |
| Parameters | +name: string | Username |
| Response Body | JSON209 | |
| Permissions | USR | |

R210: Delete Account Action

|  |  |  |
| --- | --- | --- |
| URL | /{username} | |
| Description | This web resource deletes an account from the system. | |
| Method | DELETE | |
| Parameters | +username: string | Username |
| Redirects | R101, R103 | |
| Permissions | USR | |

Module M03: Events

Endpoints of Module Events:

These are the endpoints available in the Events.

* R301: View Events /{id\_event}
* R302: Add Event Form /
* R303: Add Event Action /
* R304: Edit Event Form /{id\_event}
* R305: Edit Event Action /{id\_event}
* R306: Delete Event Action /{id\_event}
* R307: Search Events /search
* R308: Search Events API /search/q={event\_name}
* R309: Invite Users Action /{id\_event}
* R310: Accept Invite Action /{id\_event}
* R311: View Participants /{id\_event}
* R312: Remove Participants Action /{id\_event}
* R313: View Comments /{id\_event}
* R314: Create Post Form /{id\_event}
* R315: Create Post Action /{id\_event}
* R316: Edit Post Form /{id\_event}
* R317: Edit Post Action /{id\_event}
* R318: Delete Post Action /{id\_event}
* R319: Rate Form /{id\_event}
* R320: Rate Action /{id\_event}

R301: View Event

|  |  |  |
| --- | --- | --- |
| URL | /{event\_id } | |
| Description | Shows the event information. | |
| Method | GET | |
| Parameters | +event\_id: integer | Event primary key |
| +user\_id: integer | User primary key |
| UI | [UI10](https://quaresma1997.github.io/lbaw1765/eventMemb.html) | |
| Permissions | USR | |

R302: Add Event Form

|  |  |  |
| --- | --- | --- |
| URL | / | |
| Description | Form to add an event. | |
| Method | GET | |
| Parameters | +user\_id: integer | User primary key |
| UI | [UI05](https://quaresma1997.github.io/lbaw1765/homepage.html) | |
| SUBMIT | R303 | |
| Permissions | USR | |

R303: Add Event Action

|  |  |  |
| --- | --- | --- |
| URL | / | |
| Description | Inserts an event into the system. | |
| Method | POST | |
| Parameters | +user\_id: integer | User primary key |
| Response Body | +name: string | Event name |
| +type: string | Type |
| +category: string | Category |
| +date: datetime | Date |
| +country: string | Country |
| +city: string | City |
| +place: string | Place |
| +description: string | Description |
| Permissions | USR | |

R304: Edit Event Form

|  |  |  |
| --- | --- | --- |
| URL | /{event\_id} | |
| Description | Form to edit the event information. | |
| Method | GET | |
| Parameters | +owner\_id: integer | User primary key |
| +event\_id: integer | Event primary key |
| UI | [UI10](https://quaresma1997.github.io/lbaw1765/eventOwner.html) | |
| SUBMIT | R305 | |
| Permissions | OWN | |

R305: Edit Event Action

|  |  |  |
| --- | --- | --- |
| URL | /{event\_id } | |
| Description | This web resource updates the event information in the system. Redirects to the updated event on success. | |
| Method | PUT | |
| Parameters | +event\_id: integer | Event primary key |
| Request Body | ?name: string | Event name |
| ?type: string | Type |
| ?category: string | Category |
| ?date: datetime | Date |
| ?country: string | Country |
| ?city: string | City |
| ?place: string | Place |
| ?description: string | Description |
| Redirects | R301 | Success |
| Permissions | OWN | |

R306: Delete Event Action

|  |  |  |
| --- | --- | --- |
| URL | /{event\_id } | |
| Description | This web resource deletes an event from the system | |
| Method | DELETE | |
| Parameters | +event\_id: integer | Event primary key |
| Redirects | [/](https://quaresma1997.github.io/lbaw1765/homepage.html) | |
| Permissions | OWN, ADM | |

R307: Search Events

|  |  |  |
| --- | --- | --- |
| URL | /search | |
| Description | Form to search events. | |
| Method | GET | |
| Parameters | +name: string | Event name |
| UI | [UI15](https://quaresma1997.github.io/lbaw1765/searchLogged.html) | |
| AJAX Calls | R308 | |
| Permissions | USR | |

R308: Search Events API

|  |  |  |
| --- | --- | --- |
| URL | /search/?name={event\_name} | |
| Description | This web resource searches the system for events and returns the results. | |
| Method | GET | |
| Parameters | +name: string | Event name |
| Response Body | JSON308 | |
| Permissions | USR | |

R309: Invite User Action

|  |  |  |
| --- | --- | --- |
| URL | /{event\_id} | |
| Description | This web resource inserts an event invite into the system. | |
| Method | POST | |
| Parameters | +event\_id: integer | Event primary key |
| Request Body | ?receiver\_id: integer | Users primary key |
| Redirects | R301 | |
| Permissions | OWN | |

R310: Accept Invite Action

|  |  |  |
| --- | --- | --- |
| URL | /{event\_id} | |
| Description | This web resource inserts a participant into the system. | |
| Method | POST | |
| Parameters | +event\_id: integer | Event primary key |
| Request Body | ?user\_id: integer | Users primary key |
| Redirects | R301 | |
| Permissions | USR | |

R311: View Participants

|  |  |  |
| --- | --- | --- |
| URL | /{event\_id } | |
| Description | Shows the participants of an event. | |
| Method | GET | |
| Parameters | +event\_id: integer | Event primary key |
| UI | [UI10](https://quaresma1997.github.io/lbaw1765/eventOwner.html) | |
| Permissions | PRT, OWN, ADM | |

R312: Remove Participant Action

|  |  |  |
| --- | --- | --- |
| URL | /{event\_id } | |
| Description | This web resource removes a participant of an event from the system | |
| Method | DELETE | |
| Parameters | +event\_id: integer | Event primary key |
| Request body | ?user\_id: integer | Participant |
| Redirects | R301 | |
| Permissions | OWN | |

R313: View Comments

|  |  |  |
| --- | --- | --- |
| URL | /{event\_id } | |
| Description | Shows the comments of a post. | |
| Method | GET | |
| Parameters | +event\_id: integer | Event primary key |
| +post\_id: integer | Post primary key |
| UI | [UI10](https://quaresma1997.github.io/lbaw1765/eventOwner.html) | |
| Permissions | PRT, OWN, ADM | |

R314: Create Post Form

|  |  |  |
| --- | --- | --- |
| URL | /{event\_id} | |
| Description | Form to create a post. | |
| Method | GET | |
| Parameters | +event\_id: integer | Event primary key |
| UI | [UI10](https://quaresma1997.github.io/lbaw1765/eventOwner.html) | |
| SUBMIT | R315 | |
| Permissions | PRT, OWN, ADM | |

R315: Create Post Action

|  |  |  |
| --- | --- | --- |
| URL | /{event\_id } | |
| Description | This web resource inserts a post in an event into the system. | |
| Method | POST | |
| Parameters | +event\_id: integer | Event primary key |
| Response Body | +image\_path: string | Image\_path |
| +date: datetime | Date |
| +description: string | Description |
| Permissions | PRT, OWN, ADM | |

R316: Edit Post Form

|  |  |  |
| --- | --- | --- |
| URL | /{event\_id} | |
| Description | Form to edit a post. | |
| Method | GET | |
| Parameters | +event\_id: integer | Event primary key |
| +post\_id: integer | Post primary key |
| UI | [UI10](https://quaresma1997.github.io/lbaw1765/eventOwner.html) | |
| SUBMIT | R317 | |
| Permissions | PRT, OWN, ADM | |

R317: Edit Post Action

|  |  |  |
| --- | --- | --- |
| URL | /{event\_id} | |
| Description | This web resource updates the event information in the system. Redirects to the updated event on success. | |
| Method | PUT | |
| Parameters | +post\_id: integer | Posts primary key |
| +event\_id: integer | Events primary key |
| Request Body | ?image\_path: string | Image\_path |
| ?date: datetime | Date |
| ?description: string | Description |
| Redirects | R301 | Success |
| Permissions | PRT, OWN, ADM | |

R318: Delete Post Action

|  |  |  |
| --- | --- | --- |
| URL | /{event\_id} | |
| Description | This web resource deletes a post from the system | |
| Method | DELETE | |
| Parameters | +event\_id: integer | Event primary key |
| Request Body | ?post\_id: integer | Post primary key |
| Redirects | R301 | |
| Permissions | OWN, ADM, PRT | |

R319: Rate Form

|  |  |  |
| --- | --- | --- |
| URL | /{event\_id} | |
| Description | Form to rate an event . | |
| Method | GET | |
| Parameters | +event\_id: integer | Event primary key |
| UI | [UI12](https://quaresma1997.github.io/lbaw1765/eventPart.html) | |
| SUBMIT | R315 | |
| Permissions | PRT | |

R320: Rate Action

|  |  |  |
| --- | --- | --- |
| URL | /{event\_id } | |
| Description | Inserts a rating of an event into the system. | |
| Method | POST | |
| Parameters | +event\_id: integer | Event primary key |
| Request Body | ?value: integer | Rating value |
| Redirects | R301 | Success |
| Permissions | PRT | |

Module M04: Administration

Endpoints of Module Administration:

These are the endpoints available in the Administration.

* R401: Get users /admin
* R402: Ban users Action /admin
* R403: Get events /admin

R401: Get users

|  |  |
| --- | --- |
| URL | /admin |
| Description | Shows the all users in the system. |
| Method | GET |
| UI | [UI04](https://quaresma1997.github.io/lbaw1765/admin.html) |
| Permissions | ADM |

R402: Ban users Action

|  |  |  |
| --- | --- | --- |
| URL | /admin | |
| Description | This web resource inserts a ban user into the system. | |
| Method | POST | |
| Request Body | ?user\_id: integer | User (to ban) primary key |
| Redirects | R401 | |
| Permissions | ADM | |

R403: Get events

|  |  |
| --- | --- |
| URL | /admin |
| Description | Shows the all events in the system. |
| Method | GET |
| UI | [UI04](https://quaresma1997.github.io/lbaw1765/admin.html) |
| Permissions | ADM |

Module M05: Static Pages

Endpoints of Module Static Pages:

These are the endpoints available in the Static Pages.

* R501: About /about
* R502: 404 /404

R501: About

|  |  |
| --- | --- |
| URL | /about |
| Description | Get about page. |
| Method | GET |
| UI | [UI14](https://quaresma1997.github.io/lbaw1765/about.html) |
| Permissions | PUB |

R502: 404

|  |  |
| --- | --- |
| URL | /404 |
| Description | Get 404 page. |
| Method | GET |
| UI |  |
| Permissions | PUB |

# JSON

JSON209: Search Users: {user}[]

{

"users": [

{

"id": "1",

"username": "sodales",

"email": "sodales.at@curae.co.uk",

"image\_path": "/imgs/natu.jpg"

},

{

"id": "2",

"username": "uso1",

"email": "aliquam.iaculis.lacus@amet.co.uk",

"image\_path": "/imgs/natur.jpg"

}

]

}

JSON308: Search Events: {event}[]

{

"events": [

{

"id": "1",

"name": "Antonys Birthday Party",

"date": "2018-12-04 12:30:19.000000",

"category": "Sports"

},

{

"id": "2",

"name": "ENEI",

"date": "2018-04-24 12:30:19.000000",

"category": "Sports"

}

]

}

# **Revision History:**

1. Change login and sign up to be pages with redirects in case of failure
2. Edit profile with AJAX
3. Correction of redirects for routes and URL in general
4. Removing the reset password form
5. View notifications is no longer a resource
6. User\_id is now obtained by session and, so, many tables were changed accordingly
7. Added view events in the admin page

# **Grupo1765, 18/04/2018**

* Mariana Duarte Guimarães, [up201307777@fe.up.pt](mailto:up201307777@fe.up.pt)
* Rui Emanuel Cabral de Almeida Quaresma, [up201503005@fe.up.pt](mailto:up201503005@fe.up.pt)
* Rui Pedro Machado Araújo, [up201403263@fe.up.pt](mailto:up201403263@fe.up.pt)
* Tiago Duarte Carvalho, [up201504461@fe.up.pt](mailto:up201504461@fe.up.pt)