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.

1. 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.

2. 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.

3. 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
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	/homepage	Success
	R101	Fail
Permissions	PUB	

R103: Register Form

URL	/register
Description	Form to sign up a new user account.
Method	GET
UI	UI02
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	/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	/index	Success
Permissions	USR	

Module M02: Users

Endpoints of Module Users:

These are the endpoints available in the Users.

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

R201: View Profile

URL	/profile/{username}	
Description	Shows the user individual profile page.	
Method	GET	
Parameters	+username: string	User username
UI	profile	
Permissions	USR	

R202: Edit Profile Form

URL	/profile/{username}	
Description	Form to edit the user information.	
Method	GET	
Parameters	+username: string	User username
UI	profile	
SUBMIT	R203	
Permissions	PUB	

R203: Edit Profile Action

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

Endpoints of Module Events:

These are the endpoints available in the Events.

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

R301: View Event

URL	/events/{event_id }	
Description	Shows the event information.	
Method	GET	
Parameters	+event_id: integer	Event primary key
	+user_id: integer	User primary key
UI	UI10	
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	
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	/	
Permissions	OWN, ADM	

R307: Search Events

URL	/search	
Description	Form to search events.	
Method	GET	
Parameters	+name: string	Event name
UI	UI15	
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	
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	
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	
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	
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	
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	
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	
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
Permissions	PUB

R502: 404

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

4. JSON

JSON209: Search Users: {user}[]

```json
{
    "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}[]

```json
{
    "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

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