

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

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1. Overview

M01: Authentication and Individual Profile

Web resources associated with user authentication and individual profile management include the following system features: login/logout, registration, credential recovery, view and edit personal profile information, manage purchased tickets and upcoming events and see activity feed.

M02: User Management

Web resources associated with user management include the following system features: view, search and befriend users.

M03: Events

Web resources associated with events include the following system features: creating, joining, inviting and comment, as well as ban and update the information(the latter are for event admins only). Activity feed, participants and comments will also be available to inspect.

M04: Tickets

Web resources associated with tickets include the following system features: purchasing, choosing the type of ticket and managing them at the account.

**M05:
Communities**

Web resources associated with communities include the following system features: creating, joining and inviting, as well as ban and update the information(the latter are for community admins only). Activity feed and events associated will also be available to inspect.

**M06: Website
Administration**

Web resources associated with the website administration include: delete or block user accounts and manage their comments, as well as ban events and communities.

**M07: Static
pages**

Web resources associated with static content include the following system features: dashboard, about, contact, faq and error pages.

2. Permissions

VISI	Visitor	Group of users without privileges
MEMB	Member	Authenticated User
OWNR	Owner	Member that created a comment
CADM	Community Administrator	Privileged Member that manages a Community
EADM	Event Administrator	Privileged Member that manages an Event
	Website	Privileged Member that manages

3. Modules

M01: Authentication and Individual Profile

Endpoints of Module Authentication and Individual Profile

- R101: Visitor Homepage /
- R102: Member Homepage /
- R103: Login Form /login
- R104: Login Action /login
- R105: Logout Action /logout
- R106: Register Form /register
- R107: Register Action /register
- R108: View Profile /member/{username}
- R109: Edit Profile Form /member/edit
- R110: Edit Profile Action /member/edit
- R111: Password Reset Form /password/reset
- R112: Password Reset Action /password/reset

R101: Visitor Homepage

URL	/
Description	Visitor Homepage.
Method	GET
UI	UI14
Permissions	VISI

R102: Member Homepage

URL	/login
Description	Member Homepage
Method	GET
UI	UI14
Permissions	VISI

R103: Login Form

URL	/login
Description	Page with a form for a Visitor to login.
Method	GET
UI	UI14
SUBMIT	R104
Permissions	VISI

R104: Login Action

URL	/login
Description	Logs the Visitor into the system. If successful, redirects to the main homepage, otherwise it goes back to the login form.
Method	POST
Request Body	+email: string Username
	+password: string Password
Redirects	R101 Success

	R103	Error
Permissions	VISI	

R105: Logout Action

URL	/logout
Description	Logs the Member out of the system. Redirects to Visitor Homepage.
Method	POST
Redirects	R101
Permissions	MEMB

R106: Register Form

URL	/register
Description	Page with a form for a Visitor to register.
Method	GET
UI	UI13
SUBMIT	R107
Permissions	VISI

R107: Register Action

URL	/register
Description	Creates an account and logs the Visitor into the system, if successful, by redirecting to the Member Homepage. Otherwise, it goes back to the register form.

Method	POST	
	+username: string	Username
Request Body	+email: string	E-mail address
	+password: string	Password
	+confirmPassword: string	Password confirmation
	+country: string	Country

Redirects R102 Success R106 Error Permissions VISI

R108: View Member Profile

URL	/member/{username}
Description	Member profile page
Method	GET
Parameters	+username: integer
UI	UI15
Permissions	MEMB

R109: Edit Profile Form

URL	/member/edit
Description	Page with a form to edit profile info.
Method	GET
UI	UI16
SUBMIT	R110
Permissions	MEMB

R110 Edit Profile Action

URL	/members/edit	
Description	Edits the Member's profile information. Redirects to the Member's profile if successful. On failure goes to edit profile page.	
Method	PATCH	
Request Body	?about: string	About text
	?email: string	E-mail address
	?password: string	Password
	?confirmPassword: string	Password confirmation
	?country: string	Country
	?image: string	Profile picture path
	?name: string	Name
	?dateOfBirth: string	Date of birth
Redirects	?address: string	Member's physical address
	R108	Success

R109 Error Permissions MEMB

R111: Password Reset Form

URL	/password/reset
Description	Form to reset the Member's password

Method	GET	
Request Body	+password: string	New password
	+confirmPassword: string	Password confirmation
UI	UI22	
Permissions	MEMB	

R112: Password Reset Action

URL	/password/reset
Description	Password reset page
Method	POST
Parameters	+email: integer
Permissions	MEMB

M02: Member Management

Endpoints of Member Management

- R201: Members [/members/{type}/{query}](#)
- R202: Befriend Member Action [/buddies/add/{username}](#)
- R203: Defriend Member Action [/buddies/remove/{username}](#)
- R204: Members API [api/members](#)

R201: Members

URL	/members/{type}/{query}
Description	Page with a search bar to search for members.
Method	GET

Parameters	+type: string	Defines the search.
	+query: integer or string	If type is "page", sets the page number's search. If type is "search", it sets the string's search
	? username: integer	member: username
	?name: string	member: name
AJAX Calls	R604	
Permissions	MEMB	

R202: Befriend Member Action

URL	/buddies/add/{username}
Description	Web resource that adds a member as a buddy. Whether it succeeds or fails, the Member stays on the same page.
Method	POST
Parameters	+username: integer
Permissions	MEMB

R203: Unfriend Member Action

URL	/buddies/remove/{username}
Description	Web resource that removes a member as a buddy. Whether it succeeds or fails, the Member stays on

the same page.

Method	POST
Parameters	+username: integer
Permissions	MEMB

R204: Members

URL	/api/members/	
Description	Web resource searches the system for members and returns the results.	
Method	GET	
Parameters	?query: string	Member username
	?name: string	Member name
Response Body	JSON604	
Permissions	MEMB	

M03: Events

Endpoints of Module Events

These are the endpoints available in the Events Module.

- R301: Events [/events/{type}/{query}](#)
- R302: View Event [/events/{idevent}](#)
- R303: Create Event Form [/events/create](#)
- R304: Create Event Action [/events/create](#)
- R305: Edit Event Form [/events/{idevent}/edit](#)
- R306: Edit Event Action [/events/{idevent}/edit](#)
- R307: Invite Person Form [/events/{idevent}](#)

- R308: Invite Person Action </events/{idevent}/invite>
- R309: Delete Event Action </events/{id}>
- R310: Events <api/events>

R301: Events

URL	/events/{type}/{query}	
Description	Page with a form to search events.	
Method	GET	
Parameters	+type: string	Defines the search.
	+query: integer or string	If type is "page", sets the page number's search. If type is "search", it sets the string's search
	?name: string	event: name
	?city: string	event: city
	?start: date	event: startDay
UI	UI12	
AJAX Calls	R210	
Permissions	MEMB	

R302: View Event

URL	/events/{idevent}
Description	Event page
Method	GET
Parameters	+idevent: integer event: primary key
UI	UI09
Permissions	VISI, MEMB

R303: Create Event Form

URL	/events/create
Description	Page with a form to create a new event.
Method	GET
UI	UI08
SUBMIT	R304
Permissions	MEMB

R304: Create Event Action

URL	/events/create
Description	Web resource that creates a new event based on the input received. Redirects to the new event page on success and back to the new event form on failure.
Method	POST
	?name: string Event name
	?Description: string Event description

**Request
Body**

?startDate: date	Event start date
?endDate: date	Event end date
?visibility: boolean	Event visibility to uninvited users
?image: string	Profile picture path
?location: string	Event location
?lodgingLink: string	URL to external lodging page
?venueInformation: string	Information on the event's venue

Redirects R302 Success R303 Error Permissions MEMB

R305: Edit Event Form

URL	/events/{idevent}/edit
Description	Page with a form to edit an existing event.
Method	GET
Parameters	+idevent: integer event: primary key
UI	UI10
SUBMIT	R306
Permissions	EADM

R306: Edit Event Action

URL	/events/{idevent}/edit
	Web resource that edits an existing event based on

Description	the input received. Redirects to the updated event page on success and back to the edit event form on failure.	
Method	PATCH	
Parameters	+idevent: integer	event: primary key
	?name: string	Event name
	?Description: string	Event description
	?startDate: date	Event start date
	?endDate: date	Event end date
Request Body	?visibility: boolean	Event visibility to uninvited users
	?image: string	Profile picture path
	?location: string	Event location
	?lodgingLink: string	URL to external lodging page
	?venueInformation: string	Information on the event's venue

Redirects R302 Success R305 Error Permissions EADM

R307: Invite Member Action

URL	/events/{idevent}/invite	
Description	Web resource that creates a notification for the invited Member. Redirects to the event page.	
Method	POST	
Parameters	+idevent: integer	event: primary key

Request Body	+idmember: integer	member: primary key
Redirects	R302	Success/Error
Permissions	MEMB, EADM	

R308: Delete Event Action

URL	/events/{idevent}	
Description	Web resource deletes an existing event from the sytem. Redirects to the home page on success and back to the event page on error.	
Method	DELETE	
Parameters	+idevent: integer	event: primary key
Redirects	UI02	Success
	R302	Error
Permissions	EADM	

R309: Events

URL	/api/events/	
Description	Web resource searches the system for events and returns the results.	
Method	GET	
Parameters	?query: string	Event name
	?city: string	Event city
	?start: date	Event start date

	?end: date	Event end date
Response Body	JSON210	
Permissions	MEMB	

R310: Delete Comment Action

URL	/events/{idevent}/delete_comment	
Description	Web resource that deletes a comment.	
Method	POST	
Parameters	+idevent: integer	event: primary key
	+idcomment: integer	comment: primary key
Redirects	R202	Success
	R205	Error
Permissions	EADM	

M04: Tickets

Endpoints of Module Tickets

- R401: Purchase Ticket Form </events/{idevent}/tickets>
- R402: Purchase Ticket Action </events/{idevent}/tickets>
- R403: Manage Purchased Tickets
</members/tickets/{type}/{query}>
- R404: Download Ticket PDF </members/tickets/{idticket}>

R401: Purchase Ticket Form

URL	/events/{idevent}/tickets
------------	---------------------------

Description	Page with a form used to buy tickets for an event.
Method	GET
Parameters	+idevent: integer
UI	UI23
SUBMIT	R402
Permissions	MEMB

R402: Purchase Ticket Action

URL	/events/{idevent}/tickets	
Description	Web resource that buys specified ticket(s) for an event. Redirects to Member's purchased tickets on success and either to the event page on failure or to the Edit Member Profile form in case the billing information hasn't been filled out.	
Method	POST	
Parameters	+idevent: integer	event: primary key
Request Body	+type: string	Ticket type
	+amount: integer	Ticket amount
Redirects	R403	Success
	R109	Error (when there is missing billing information)
	R302	Error

Permissions MEMB

R403: Manage Purchased Tickets

URL	/member/tickets/{pageNum}	
Description	Page with information about a member's purchased tickets.	
Method	GET	
UI	UI15	
Parameters	+type: string	Defines the search.
	+query: integer or string	If type is "page", sets the page number's search. If type is "search", it sets the string's search
Permissions	MEMB	

R404: Download Ticket PDF

URL	/member/tickets/{idticket}	
Description	Page with a ticket's PDF file to be printed out.	
Method	GET	
Parameters	+idticket: integer	
UI	UI15	
Permissions	MEMB	

M05: Communities

Endpoints of Module Communities

- R501: Communities [/communities/{type}/{query}](#)
- R502: View Community [/communities/{idcommunity}](#)
- R503: Create Community Form [/communities/create](#)
- R504: Create Community Action [/communities/create](#)
- R505: Edit Community Form [/communities/{idcommunity}/edit](#)
- R506: Edit Community Action [/communities/{idcommunity}/edit](#)
- R507: Invite Person Form [/communities/{idcommunity}](#)
- R508: Invite Person Action [/communities/{idcommunity}/invite](#)
- R509: Delete Community Action [/communities/{idcommunity}](#)
- R510: Communities API [/api/communities](#)

R501: Communities

URL	/communities/{type}/{query}	
Description	Page with a form to search for communities.	
Method	GET	
Parameters	+type: string	Defines the search.
	+query: integer or string	If type is "page", sets the page number's search. If type is "search", it sets the string's search
	?name: string	community: name
	? category: string	community: category
UI	UI07	
AJAX Calls	R310	
Permissions		

R502: View Community

URL	/communities/{id}
Description	Community page.
Method	GET
Parameters	+idcommunity: integer community: primary key
UI	UI04
Permissions	VISI, MEMB

R503: Create Community Form

URL	/communities/create
Description	Page with a form to create a new community.
Method	GET
UI	UI03
SUBMIT	R504
Permissions	MEMB

R504: Create Community Action

URL	/communities/create
Description	Web resource that creates a new community based on the input received. Redirects to the new community page on success and back to the new community form on failure.

Method	POST
Request Body	+name: string Community name
	+description: string Community description
	+visibility: boolean Community visibility to uninvited users
	+image: string Profile picture path
Redirects	R502 Success
	R503 Error
Permissions	MEMB

R505: Edit Community Form

URL	/communities/{idcommunity}/edit
Description	Page with a form to edit an existing community.
Method	GET
Parameters	+idcommunity: integer community: primary key
UI	UI05
SUBMIT	R506
Permissions	CADM

R506: Edit Community Action

URL	/communities/{idcommunity}/edit
	Web resource that edits an existing community based on the input received. Redirects to updated

Description	community page on success and back to the form on error.	
Method	PATCH	
Parameters	+idcommunity: integer	community: primary key
	+name: string	Community name
	+description: string	Community description
Request Body	+visibility: boolean	Community visibility to uninvited users
	+image: string	Profile picture path
	R502	Success
Redirects	R505	Error
Permissions	CADM	

R507: Invite Member Action

URL	/events/{idcommunity}/invite	
Description	Web resource that creates a notification for the invited Member. Redirects to the Community page.	
Method	POST	
Parameters	+idevent: integer	event: primary key
Request Body	+idmember: integer	member: primary key
Redirects	R502	Success/Error

Permissions MEMB, EADM

R508: Delete Community Action

URL	/communities/{idcommunity}	
Description	Web resource that deletes an existing existing from the system. Redirects to the homepage on success and back to the community page on failure.	
Method	DELETE	
Parameters	+idcommunity: integer	community: primary key
Redirects	UI02	Success
	R502	Error
Permissions	CADM	

R509: Communities API

URL	/api/communities/	
Description	Web resource searches the system for communities and returns the results.	
Method	GET	
Parameters	?query: string	Community name
	?category: string	Community category
Response Body	JSON310	
Permissions	MEMB	

M06: Website Administration

Endpoints of Module User Administration

- R601: View Reports </administration/reports/{type}/{query}>
- R602: Process Report Action </administration/reports/{idreport}>
- R603: Ban Event /administration/ban_event/{type}/{query}
- R604: Ban Event Action /administration/ban_event/{idevent}
- R605: Ban Community
/administration/ban_community/{type}/{query}
- R606: Ban Community Action
/administration/ban_community/{idcommunity}
- R607: Ban Member
/administration/ban_member/{type}/{query}
- R608: Ban Member Action
/administration/ban_member/{idmember}
- R609: Remove Comment
/administration/remove_comment/{type}/{query}
- R610: Remove Comment Action
/administration/remove_comment/{idcomment}
- R611: Toggle Admin Privileges </administration/admin>
- R612: Toggle Admin Privileges Action
</administration/admin/{idmember}>

R601: View Reports

URL	/administration/reports/{type}/{query}	
Description	Page with the list of Reports created by Members.	
Method	GET	
	+type: string	Defines the search.
	+query: integer or	If type is "page", sets the page number's search. If type is "search",

Parameters	string	it sets the string's search
	+idmember: integer	member: primary key
	pageNum: integer	current page of the list
UI	UI17	
Permissions	ADMN	

R602: Process Report Action

URL	/administration/reports/{idreport}
Description	Sets a Report as solved.
Method	POST
Parameters	+idreport: integer
Permissions	ADMN

R603: Ban Event

URL	/administration/ban_event/{type}/{query}	
Description	Page with Events to ban.	
Method	GET	
Parameters	+type: string	Defines the search.
	+query: integer or string	If type is "page", sets the page number's search. If type is "search", it sets the string's search
Permissions	ADMN	

R604: Ban Event Action

URL	/administration/ban_event/{idevent}	
Description	Web resource that bans an event.	
Method	POST	
Parameters	+idevent: integer	event: primary key
Redirects	R603	Success/Error
Permissions	ADMN	

R605: Ban Community

URL	/administration/ban_community/{type}/{query}	
Description	Page with communities to ban.	
Method	GET	
Parameters	+type: string	Defines the search.
	+query: integer or string	If type is "page", sets the page number's search. If type is "search", it sets the string's search
Permissions	ADMN	

R606: Ban Community Action

URL	/administration/ban_community/{idcommunity}	
Description	Web resource that bans a community.	
Method	POST	

Parameters	+idcommunity: integer	community: primary key
Redirects	R605	Success/Error
Permissions	ADMN	

R607: Ban Member

URL	/administration/ban_member/{type}/{query}	
Description	Page with members to ban.	
Method	GET	
Parameters	+type: string	Defines the search.
	+query: integer or string	If type is "page", sets the page number's search. If type is "search", it sets the string's search
Permissions	ADMN	

R608: Ban Member Action

URL	/administration/ban_member/{idmember}	
Description	Web resource that bans a member.	
Method	POST	
Parameters	+idmember: integer	member: primary key
Redirects	R607	Success/Error
Permissions	ADMN	

R609: Remove Comment

URL	/administration/remove_comment/{type}/{query}	
Description	Page with comments to remove.	
Method	GET	
Parameters	+type: string	Defines the search.
	+query: integer or string	If type is "page", sets the page number's search. If type is "search", it sets the string's search
Permissions	ADMN	

R610: Remove Comment Action

URL	/administration/remove_comment/{idcomment}	
Description	Web resource that removes a comment.	
Method	DELETE	
Parameters	+idcomment: integer	comment: primary key
Redirects	R609	Success/Error
Permissions	ADMN	

R611: Toggle Admin Privileges

URL	/administration/admin	
Description	Page with form to toggle website Administrator privileges.	
Method	GET	
Permissions	ADMN	

R612: Toggle Admin Privileges Action

URL	/administration/admin/{idmember}	
Description	Web resource that toggles website Administrator privileges.	
Method	PATCH	
Parameters	+idmember: integer	member: primary key
Redirects	R611	Success/Error
Permissions	ADMN	

M07: Static pages

Endpoints of Static Pages

- R701: About [/about](#)
- R702: Contact [/contact](#)
- R703: FAQ [/faq](#)
- R704: 404 [/404](#)

R701: About

URL	/about
Description	About page.
Method	GET
UI	UI19
Permissions	VISI, MEMB

R702: Contact

URL	/contact
Description	Contact page.
Method	GET
UI	UI20
Permissions	VISI, MEMB

R703: FAQ

URL	/faq
Description	Frequently Asked Questions page.
Method	GET
UI	UI18
Permissions	VISI, MEMB

R704: 404

URL	/404
Description	Page that appears when a resource is missing.
Method	GET
UI	UI21
Permissions	VISI, MEMB

4. JSON/XML Types

JSON210: Events

```
{
```

```
"event": [  
  {  
    "idevent": "1",  
    "name": "Queima das Fitas",  
    "description": "A week full of activities",  
    "imagePath" :  
    "http://dummyimage.com/145x144.jpg/cc0000/ffffff",  
    "startday" : "2018-05-10",  
    "endday" : "2018-05-17",  
    "starttime" : "09:00",  
    "endtime" : "09:00",  
    "country": "Portugal",  
    "city": "Porto",  
    "address": "null",  
    "publiclink": "https://reevent.io/events/1",  
    "ispublic": "true",  
    "community": "null",  
    "isactive": "true",  
  },  
  {  
    "idevent": "10",  
    "name": "Feupinhos na Queima",  
    "description": "Javardar no queimódromo",  
    "imagePath" :  
    "http://dummyimage.com/145x144.jpg/cc1000/ff67ff",  
    "startday" : "2018-05-11",  
    "endday" : "2018-05-16",  
    "starttime" : "07:00",  
    "endtime" : "23:59",  
    "country": "Portugal",  
    "city": "Porto",  
    "address": "Rua Dr. Roberto Frias, s/n",  
    "publiclink": "https://reevent.io/events/10",  
    "ispublic": "false",  
    "community": "2",  
    "isactive": "true",  
  }  
]  
}
```

JSON310: Communities

```
{
  "community": [
    {
      "idcommunity": "1",
      "name": "Angélicos",
      "description": "Mr Burns' Burning Cult",
      "creationdate": "2017-07-18",
      "imagePath":
        "http://dummyimage.com/145x144.jpg/cc0000/ffffff",
      "publiclink": "https://reevent.io/communities/1",
      "ispublic": "true",
      "isactive": "true",
    },
    {
      "idcommunity": "2",
      "name": "Feupinhos",
      "description": "Noob central ",
      "creationdate": "2018-01-01",
      "imagePath":
        "http://dummyimage.com/145x144.jpg/cc0000/ffffff",
      "publiclink": "https://reevent.io/communities/2",
      "ispublic": "true",
      "isactive": "true",
    }
  ]
}
```

JSON604: Members

```
{
  "member": [
```



```

{
  "idmember": "100",
  "name": "Fernando Mendes",
  "username": "xX_ES83D4CUL0_Xx",
  "country": "Portugal",
  "about": "Nandinho das Montras",
  "profilepicture" :
"http://dummyimage.com/145x144.jpg/cc0000/ffffff",
  "registrationdate": "https://reevent.io/members/100"
},
{
  "idmember": "2",
  "name": "Hugo Cunha",
  "username": "Motinhas27",
  "country": "Espanha",
  "about": "Gosto de carros",
  "profilepicture" :
"http://dummyimage.com/145x144.jpg/cc0000/123fff",
  "registrationdate": "https://reevent.io/members/2"
}
]
}

```

Changelog

1. Fixed links
2. Changed order of Modules to become sequential
3. Added new permission for Owner
4. Added Resources for Homepages
5. Changed some "id" parameters to "username"
6. Removed idmember from ticket resources
7. Removed parameters from reset password
8. Separated Admin URLs
9. URL parameters and table parameters are now equal
10. Added type of search in some URLs
11. Changed POST method to PUT method on Edit Actions

12. Changed Search resources names