Web Resources Documentation (A7)

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 Media Library, 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 login/logout and registration.
M02: Individual Profile	Web resources associated with individual user items, includes the following system features: edit profile, change password, view and accept project invites, and, if you're the project coordinator you can also accept or deny join requests.
M03: Projects	Web resources associated with project view and creation, includes the following system features: see all public projects with title and description, create a new project, search for a public project, join a project and see the contributors. When creating project is possible to choose description, title, privacy and number of contributors. If the user is the coordinator it can edit project settings, invite other people to project and ban members from project.
M04: Task list	Web resources associated with the task list, includes the following system features: view task list, create new tasks, edit tasks, delete tasks and filter tasks.
M05: Forum	Web resources associated with the forum, includes the following system features: create new forum post and see forum posts with name and description. Inside a Forum Post it's possible to see messages, write messages and filter comments.
M06:Static pages	Web resources with static content are associated with this module: home, about, contact and faq.

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, visitors
USR	User	Authenticated user
OWN	Owner	Group of users that can update their profiles and have privileges to access their notifications and projects (includes forum, posts and messages)

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 Module.

- **R101: Login Form** [/login]
- **R102: Login Action** [/login]
- **R103: Logout Action** [/home]
- **R104: Register Form** [/register]
- **R105: Register Action** [/register]

R101: Login Form

URL	/login
Description	Page with a form to login to a user account.
Method	GET

UI	UI05
SUBMIT	R102
Permissions	PUB

R102: Login Action

URL	`/login`	
Description	This web resource logs the user into the system. Redirects to the user projects page on success and the login form on failure.	
Method	POST	
Request Body	+email: string	E-mail
	+password: string	Password
Redirects	R305	Success
	R101	Error
Permissions	PUB	

R103: Logout Action

URL	`/logout`	
Description	This web resource logs out the authenticated user.	
Method	POST	
Redirects	R101 HOME	Success

Permissions	USR

R104: Register Form

URL	`/register`
Description	Page with a form to register a new user account.
Method	GET
UI	[UI06](UI06)
SUBMIT	[R105](R105)
Permissions	PUB

R105: Register Action

URL	`/register`	
Description	This web resource inserts the user into the system. Redirects to the user projects page on success and the register form on failure.	
Method	POST	
Request Body	+name: string	Name
	+lastName: string	Last Name
	+gender: char	Gender
	+country: string	Country

	+email: string	E-mail
	+username: string	Username
	+password: string	Password
Redirects	[R401](#)	Success
	[R104](#)	Error
Permissions	PUB	

Module M02: Individual Profile

Endpoints of Module Individual Profile

These are the endpoints available in the Individual Profile Module.

- **R201: Edit Profile Form** [`/profile/{id}/pr`]
- **R202: Edit Profile Action** [`/profile/{id}/pr`]
- **R203: Password Reset Form** [`/profile/{id}/pw`]
- **R204: Password Reset Action** [`/profile/{id}/pw`]
- **R205: View project invites** [`/profile/{id}/inv`]
- **R206: Accept project invites[** `/profile/{id}/inv`]
- **R207: View join requests[** `/profile/{id}/join`]
- **R208: Accept or deny join requests** [`/profile/{id}/join`]

R201: Edit Profile Form

URL	`/profile/{id}/edit`
Description	Page with a form to edit profile info.

Method	GET	
Parameters	+id: integer	user primary key
UI	UI07	
SUBMIT	R305	
Permissions	OWN	

R202: Edit Profile Action

URL	`/profile/{id}/edit`	
Description	Web resource that changes user profile info based on the input received. Redirects to the user projects page on success and edit profile page on failure.	
Method	POST	
Parameters	+id: integer	user primary key
Request Body	?fisrtName: string	New first name
	?lasName: string	New last name
Redirects	R305	Success
	R201	Error
Permissions	OWN	

R203: Password recovery Form

URL	`/profile/{id}/password`
Description	Page with a form to request a token to reset the password.
Method	GET
UI	UI07
SUBMIT	R204
Permissions	OWN

R204: Password recovery Action

URL	`/profile/{id}/password`	
Description	Web resource that sends a reset password link to the specified email.	
Method	POST	
Request Body	+email: string	User email
Redirects	UI01	Success
	R203	Error
Permissions	OWN	

R205: View Project Invites

URL	`/profile/{id}/invites`

Description	Shows the user's projects invites.
Method	GET
Parameters	+id: integer	user primary key
UI	UI07
Permissions	OWN

R206: Accept Projects Invites

URL	`/profile/{id}/invites`	
Description	Web resource that allow a user to join a project.	
Method	POST	
Request Body	+id_user: integer	user primary key
	+id_project: integer	project primary key
Redirects	UI07	Success
Permissions	OWN	

R207: View Join Requests

URL	`/profile/{id}/join`
Description	Shows the user's join requests.

Method	GET	
Parameters	+id: integer	user primary key
UI	UI07	
Permissions	OWN	

R208: Accept or Deny Join Requests

URL	`/profile/{id}/join`	
Description	Web resource that allow a user to accept or deny a join request.	
Method	POST	
Request Body	+id_userconv: integer	user primary key (user who requested entrance on a project)
	+id_project: integer	project primary key
Parameters	+id: integer	user primary key
Redirects	UI07	Success
Permissions	OWN	

Module M03: Projects

Endpoints of Module Projects

These are the endpoints available in the Projects Module.

- **R301: View Projects** [`/projects`]
- **R302: Add New Project Form** [`/projects/add`]
- **R303: Add New Project Action** [`/projects/add`]
- **R304: Project View Page** [`/thisproject/{id}`]
- **R305: Search Project** [`/projects`]
- **R306: View My Projects** [`/myprojects/{id}`]
- **R307: View Projects Members** [`/thisproject/{id}/memb`]

R301: View Projects

URL	`/projects`	
Description	Shows the projects's page.	
Method	GET	
Parameters	+id: integer	project primary key.
UI	UI08	
Permissions	USR	

R302: Add New Project Form

URL	`/projects/add`
Description	Page with a form to create a new project.
Method	GET
UI	UI09
SUBMIT	R303
Permissions	USR

R303: Add New Project Action

URL	/projects/add	
Description	Web resource that creates a new project based on the input received. Redirects to the project page on success and back to projects page on failure.	
Method	POST	
Request body	+title: string	Title of the Project
	+description: text	Description of the Project
	+privacy: bool	Privacy type of the project
	+maxMembers: integer	Max number of members in the project
Redirects	R203	Success
	R204	Error
Response body	JSON303	
Permissions	USR, OWN	

R304: Project View Page

URL	/thisproject/{id}
Description	Shows the projects's page.

Method	GET	
Parameters	+id: integer	project primary key.
UI	UI10	
Permissions	USR	

R305: Search Project

URL	/projects	
Description	Page with a form to search projects.	
Method	GET	
Parameters	?query: string	String field to search for in projects
Permissions	PUB	

R306: View My Projects

URL	/myprojects/{id}	
Description	Get all my projects.	
Method	GET	
Parameters	+id: integer	User primary key.
Permissions	OWN	

R307: View Projects Contributors

URL	/thisproject/{id}/members

Description	View all project members.
Method	GET
Parameters	+id: integer	Project primary key.
Permissions	USR

Module M04: Task List

Endpoints of Module Task List

These are the endpoints available in the Task List Module.

- **R401: View Task List** [/thisproject/{id}/tasks]
- **R402: Add Taks** [/thisproject/{id}/tasks/add]
- **R403: Edit Tasks** [/thisproject/{id}/tasks/edit]
- **R404: Delete Tasks** [/thisproject/{id}/tasks/del]

R401: View Task List

URL	/thisproject/{id}/tasks
Description	Get all tasks of a project.
Method	GET
Parameters	+id: integer	Project primary key.
UI	UI11
Response body	JSON401
Permissions	USR

R402: Add Tasks

URL	`/thisproject/{id}/tasks/add`	
Description	This web resource adds a new task. Redirect to project task page on success, and to create task form on failure.	
Method	POST	
Parameters	+id: integer	Project primary key.
Request Body	+title: string	Task title
	+description: string	Task description text.
	+priority: integer	Priority of the task.
Redirects	Success	R401
	Failure	R402
Permissions	USR	

R403: Edit Tasks

URL	`/thisproject/{id}/tasks/edit`	
Description	This web resource edits a task.	
Method	POST	
Parameter	+id: integer	Task primary key

Request Body	+description: string	Task description
	+priority: integer	Task priority
Redirects	Success	[R401](#)
	Failure	[R403](#)
Permissions	OWN	

R404: Delete Tasks

URL	`/thisproject/{id}/tasks/del`	
Description	This web resource deletes a task.	
Method	DELETE	
Parameters	+id: integer	Task primary key
Redirects	Success	[R401](#)
Permissions	OWN	

Module M05: Forum

Endpoints of Forum Module.

These are the endpoints available in the Forum Module.

- **R501: View Forum Page** [`/thisproject/{id}/forum`]
- **R502: View New Forum Post** [`/thisproject/{id}/forum/add`]
- **R503: Add New Forum Post** [`/thisproject/{id}/forum/add`]
- **R504: View Forum Post messages**[`/thisproject/{id}/forum/forumpost`]

- **R505: Add Forum Post message**[`/thisproject/{id}/forum/forumpost/add`]
- **R506: Delete Forum Post message**[`/thisproject/{id}/forum/forumpost/del`]

R501: View Forum Page

URL	`/thisproject/{id}/forum`	
Description	Show the forum page of a project.	
Method	GET	
Parameters	+id: integer	project primary key.
UI	[UI13](#)	
Permissions	USR	

R502: View New Forum Post

URL	`/thisproject/{id}/forum/add`	
Description	Show the forms to create a new post on the Forum Page.	
Method	GET	
Parameters	+id: integer	project primary key.
UI	[UI14](#)	
Permissions	USR	

R503: Add New Forum Post

URL	/thisproject/{id}/forum/add	
Description	This web resource adds a new forum post to the Forum Page.	
Method	POST	
Parameters	+id: integer	project primary key
Request Body	+title: string	Title of the Forum Post
	+post:text	First message of Forum Post
Returns	200 OK	The forum post was successfully added.
	400 Bad Request	Error. Error message is specified via a HTTP header.
Permissions	USR	

R504: View Forum Post messages

URL	/thisproject/{id_project}/forum/forumpost{id_post}	
Description	Show forum post messages.	
Method	GET	
Parameters	+id_project: integer	project id
	+id_post:integer	Forum post id

UI	[UI15](UI15)
Permissions	USR

R505: Add Forum Post message

URL	`/thisproject/{id_project}/forum/forumpost{id_post}/add`
Description	This web resource adds a new message in a forum post.
Method	POST
Parameters	+id_project: integer	project id
	+id_post:integer	Forum post id
	+id_forum: integer	Forum post id.
Request Body	+comment: text	Message of user.
Returns	200 OK	The message was successfully added.
	400 Bad Request	Error. Error message is specified via a HTTP header.
UI	[UI16](UI16)	
Permissions	USR	

R506: Delete Forum Post message

URL	/thisproject/{id_project}/forum/forumpost{id_post}/del	
Description	This web resource deletes a message of the Forum Post	
Method	DELETE	
Parameters	+id_project: integer	project id
	+id_post:integer	Forum post id
	+id_forum: integer	Forum post id.
Returns	200 OK	The message was successfully deleted.
	400 Bad Request	Error. Error message is specified via a HTTP header.
Permissions	OWN	

Module M06: Static pages

Endpoints of Static pages

These are the endpoints available in the Static pages Module.

- **R601: Home** /index
- **R602: About** /about
- **R603: Contact** /contact
- **R604: FAQ** /faq

R601: Home

URL	/index

Description	Get index page.
Method	GET
UI	[UI01](UI01)
Permissions	PUB

R602: About

URL	`/about`
Description	Get about page.
Method	GET
UI	[UI02](UI02)
Permissions	PUB

R603: Contact

URL	`/contact`
Description	Get contact page.
Method	GET
UI	[UI04](UI04)
Permissions	PUB

R604: FAQ

URL	/faq
Description	Get faq page.
Method	GET
UI	UI03
Permissions	PUB

4. JSON/XML Types

The structure of the JSON formatted answers must be documented as illustrated below.

JSON303: Projects: {projects}[]

```json
{
  "project": [
    {
      "id": "1",
      "title": "Creating a website",
      "description": "How to create a website ...",
      "teamSize": "100",
      "privacy": "Public",
    },
    {
      "id": "1",
      "title": "Reset your smartphone",
      "description": "How to reset your smartphone ...",
      "teamSize": "50",
      "privacy": "Private",
    }
  ]
}
```

JSON401: Projects: {tasks}[]

```json
{
  "task": [
    {
      "id": "1",
      "idProject": "1",
      "idTaskOwner": "1",
      "taskName": "Introduction Text",
      "taskDescription": "Introduction text of the book",
      "priority": "high",
      "dateCreated": "2017-06-04",
      "status": "pending",
    },
    {
      "id": "1",
      "project": "2",
      "taskOwner": "3",
      "taskName": "Database Code",
      "taskDescription": "Code of the website database",
      "priority": "low",
      "dateCreated": "2018-01-02",
      "status": "progress",     }
  ]
}
```

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