

A7: Web Resources Documentation

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 the documentation for workpad, 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.

Module Name	Module Description
M01: Authentication and Personal Profile	M01: Authentication and Personal Profile Web resources associated with user authentication and individual profile management, includes the following system features: login/logout, registration, password recovery, view and edit personal profile information.
M02: Projects	Web resources associated with project items, includes the following system features: view and edit project details and delete them; invite or remove members.
M03: Tasks and subtasks	Web resources associated with projects' tasks and subtasks, includes the following system features: view tasks and its subtasks, edit its details and delete them; assign members to task.
M04: Discussion Forums	Web resources associated with projects' discussion forums, includes the following system features: view topics and comments and edit them.
M05: User Administration and Static pages	Web resources associates with user management, specifically: view and search users, ban user accounts and projects. Web resources with static content are associated with this module: homepage, about, contact and faq.

2. Permissions

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

Role Mnemonic	Role name	Role brief
GST	Guest	Common user without any sort of privileges.
MBR	Member	Authenticated user
DEV	Developer	User that belongs to a project's developer team

Role Mnemonic	Role name	Role brief
MNGR	Manager	User that creates or manages a project
ADM	Administrator	Administrators that manages the users and projects

3. Modules

This section documents each web resource of each module, indicating the URL, HTTP methods, the possible parameters (mandatory or optional), body request, interfaces with the user, or JSON responses in the event of AJAX call to the API.

Module M01: Authentication and Personal Profile

Endpoints of Authentication and Personal Profile pages

- R101: Login form [/login]
- R102: Default login action [/login]
- R103: Google login action [/login]
- R104: Register form [/register]
- R105: Default register action [/register]
- R106: Google register action [/register]
- R107: Reset password form [/reset]
- R108: Reset default password action [/reset]
- R109: Logout action [/logout]
- R110: View profile [/profile/{id}]
- R111: Edit profile form [/profile/{id}/edit]
- R112: Edit profile action [/profile/{id}]

R101	Login Form
URL	/login
Description	Pop up that allows the user to login into its account
Method	GET
UI	UI01
Submit	R102
	R103

Permissions	PUB
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R102	Default login action
URL	/login
Description	Logs the user into its account. Redirects to the profile on success or back to the form on failure.
Method	POST

R102	Default login action
UI	UI01
Request Body	+username: string - The username
	+password: string - The password
Permissions	PUB
R103	Google login action
URL	/login
Description	Logs the user into its account with the Google API. Redirects to the profile on success or back to the form on failure.
Method	POST
UI	UI01
Request Body	+email: string - The google email
	+password: string - The password
Permissions	PUB
R104	Register form
URL	/register
Description	Pop up that allows the user to create a new account to join workpad.
Method	GET
UI	UI01
Submit	R105
	R106
Permissions	PUB
R105	Default register action
URL	/register
Description	Creates the account and logs the user into its account. Redirects to the profile on success or back to the form on failure.
Method	POST
UI	UI01
Request Body	+username: string - The account username

R105	Default register action
	+email: string - The account email
	+password: string - The account password
Redirects	R104 - Error
	R110 - Success
Permissions	PUB
R106	Google register action
URL	/register
Description	Creates the account using the Google API and logs the user into its account. Redirects to the profile on success or back to the form on failure.
Method	POST
UI	UI01
Request Body	+username: string - The account username
	+email: string - The google email
	+password: string - The account password
Redirects	R104 - Error
	R110 - Success
Permissions	PUB
R107	Reset password form
URL	/reset
Description	Pop up that allows the user to reset its password.
Method	GET
UI	UI01
Submit	R108
Permissions	PUB
R108	Reset default password action
URL	/reset
Description	Sends a link to the specified email so the user can change its password. Redirects to the homepage on success or back to the form on failure.
Method	GET

R108	Reset default password action
Request Body	+email: string - The user email
Redirects	UI01 - Success
	R107 - Error
Permissions	PUB
R109	Logout action
URL	/logout
Description	Logs the user out of his account.
Method	POST
Redirects	UI01 - Success
Permissions	MBR
R110	Default register action
URL	/profile/{username}
Description	Allows the user to view its individual profile page.
Method	GET
UI	UI01
Parameters	+username: string - The account username
UI	UI03
Permissions	MBR
R111	Edit profile form
URL	/profile/{username}/edit
Description	Form that allows the user to edit its profile page
Parameters	+username: string - The account username
Method	GET
UI	UI03
Submit	R112
Permissions	MBR
R112	Edit profile action
URL	/profile/{username}

R112	Edit profile action
Description	Changes the altered user info on its profile page. Redirects to the profile on success or back to the form on failure.
Method	POST
Parameters	+username: string - The account username
Request Body	+name: string - New name
	+about: string - New about
	+description: string - New description
	+location: string - New location
	+phone_number: string - New phone_number
	+region_code: string - New region_code
Redirects	R111 - Error
	R110 - Success
Permissions	MBR

Module M02: Project pages

Endpoints of Project pages

- R201: Get projects [/projects]
- R202: Create a Project Form [/create-project]
- R203: Create a Project Action [/projects/{id}]
- R204: View a Project [/projects/{id}]
- R205: Edit Project Settings Form [/projects/{id}/settings]
- R206: Edit Project Settings Action [/projects/{id}]
- R207: Delete a Project Action [/projects/{id}/settings#delete]
- R208: Leave a Project Action [/projects/{id}/settings#leave]
- R209: Invite a member to a Project Form [/projects/{id}/settings#invite]

R201	Get Projects
URL	/projects
Description	Show all Projects where the user is a developer or a manager
Method	GET

R201	Get Projects
Parameters	+id_member: integer - The id of the member
UI	UI04
Response body	JSON201
Permissions	DEV, MNGR
R202	Create a Project Form
URL	/create-project
Description	Page with the form to create a new project
Method	GET
UI	UI06
Submit	R203
Permissions	MBR
R203	Create a Project Action
URL	/projects/{id}
Description	Web resource that creates a new project based on the input received. Redirects to the new project page on success and back to the create project form on failure.
Method	POST
	Request Body
	color: Color - project's color
	end_date: Date - project's end date
Redirects	R204 - Success
	R202 - Failure
Permissions	MBR
R204	View a Project
URL	/projects/{id}
Description	Shows a Project's Page
Method	GET
Request Body	id: integer - Project's id
UI	UI05
Permissions	DEV, MNGR
R205	Edit Project Settings Form

R205	Edit Project Settings Form
URL	/projects/{id}/settings
Description	Page with the form to edit a project's settings
Method	GET
Parameter	id: integer - Project's id
UI	UI05
Submit	R206
Permissions	MNGR
R206	Edit Project Settings Action
URL	/projects/{id}
Description	Web resource that changes a project's settings based on the input received. Redirects to the project page on success and back to the edit project settings form on failure.
Method	PUT
Parameter	id: integer - Project's ID
Request Body	+name: string - project's name
	+color: Color - project's color
	+end_date: Date - project's end date
Redirects	R204 - Success
	R205 - Failure
Permissions	MNGR
R207	Delete a Project Action
URL	/projects/{id}/settings#delete
Description	This web resource marks a project for deletion. It updates an attribute instead of actually deleting the project. Redirects to the Projects Dashboard on success and the View Project page on failure.
Method	PUT
Parameter	+id: integer - Project's ID
Redirects	R201 - Success
	R204 - Failure
Permissions	MNGR
R208	Leave a Project Action

R208	Leave a Project Action
URL	/projects/{id}/settings#leave
Description	This web resource removes the user from a Project. Redirects to the Projects Dashboard on success and the View Project page on failure.
Method	DELETE
Parameter	id: integer - Project's ID
Redirects	R201 - Success
	R204 - Failure
Permissions	DEV, MNGR
R209	Invite a member to a Project Form
URL	/projects/{id}/settings#invite
Description	Pop-up with the form to invite a new member
Method	GET
UI	UI05
Submit	R210
Permissions	MNGR
R210	Invite a member to a Project Action
URL	/projects/{id}/settings
Description	Web resource that invite a new member based on the input received. Redirects to the project page on success and back to the invite member form on failure.
Method	POST
Parameter	+id: integer - Project's ID
Request Body	+id: integer - user's ID
Redirects	R204 - Success
	R209 - Failure
Permissions	MNGR
R211	Remove a member from Project Action
URL	/projects/{id}/settings#remove
Description	Web resource that removes a project's member based on the input received. Redirects to the project page on success and to the 404 page on failure.
Method	DELETE

R211	Remove a member from Project Action
Parameter	+id: integer - Project's ID
Request Body	+id: integer - user's ID
Redirects	R204 - Success
	404 page - Failure
Permissions	MNGR
R212	Renounce the role of Manager in a Project
URL	/projects/{id}/settings#renounce
Description	Web resource that allows a manager to renounce his role in a project. Redirects to the project page on success and to the 404 page on failure.
Method	POST
Parameter	+id: integer - Project's ID
Request Body	+id: integer - user's ID
Redirects	R204 - Success
	404 page - Failure
Permissions	MNGR

Module M03: Tasks and Subtasks pages

Endpoints of Tasks and Subtasks pages

- R301: Get tasks [/projects/{id_project}/tasks]
- R302: View task details [/projects/{id_project}/tasks/{id}/details]
- R303: View task checklist [/projects/{id_project}/tasks/{id}/checklist]
- R304: Edit task [/projects/{id_project}/tasks/{id}/edit]
- R305: Delete task [/projects/{id_project}/tasks/{id}/delete]
- R306: Assign members [/projects/{id_project}/tasks/{id}/assign_members]

R301	Get tasks
URL	/projects/{id_project}/tasks
Description	This web resource displays the project's tasks
Method	GET
Parameters	+id_project: integer - Project id
Response body	JSON301
Permissions	DEV, MNGR

R302	View task details
URL	/projects/{id_project}/tasks/{id}/details
Description	Shows the task details in a pop-up
Method	GET
Parameters	+id_project: integer - Project id
	+id: integer - Task id
UI	UI05
Permissions	DEV, MNGR

R303	View task checklist
URL	/projects/{id_project}/tasks/{id}/checklist
Description	This web resource displays the task checklist
Method	GET
Parameters	+id_project: integer - Project id
	+id: integer - Task id
Response body	JSON303
Permissions	DEV, MNGR

R304	Edit Task
URL	/projects/{id_project}/tasks/{id}/edit
Description	Web resource that changes task details based on the input received
Method	PUT
Parameters	+id_project: integer - Project id
	+id: integer - Task id
Request Body	?name: string - Name of the task
	?description: string - Description of the task
	?due_date: Date - task deadline
	?issue: URL - URL to the issue linked to the task
Returns	200 OK - The task was successfully edited
	400 Bad Request - Error message is specified via a HTTP header.
	404 Not Found - No project or task with the specified primary key exists.
Permissions	MNGR

R305	Delete Task
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R305	Delete Task
URL	/projects/{id_project}/tasks/{id}/details/delete
Description	This web resource removes the task from the project. Closes the deleted task pop-up
Method	DELETE
Parameter	+id: integer - work id
	+id: integer - Task id
Returns	200 OK - The task was successfully deleted
	400 Bad Request - Error message is specified via a HTTP header.
	404 Not Found - No project or task with the specified primary key exists.
Permissions	MNGR
R306	View task checklist
URL	/projects/{id_project}/tasks/{id}/details/assign_developer
Description	This web resource assigns one of the
Method	POST
Parameters	+id_project: integer - Project id
	+id: integer - Task id
	+id_member: integer - Member id
Permissions	MNGR

Module M04: Discussion Forums

Endpoints of Forum pages

- R401: Get forums [/projects/{id_project}/forum]
- R402: Create forum for a specific topic /projects/{id_project}/forum/create_forum
- R403: View forum of a specific topic [/projects/{id_project}/forum/{id_forum}]
- R404: Get forum comments [/projects/{id_project}/forum/{id_forum}/comments]
- R405: Create comment [/projects/{id_project}/forum/{id_forum}/create_comment]
- R406: Edit comment [/projects/{id_project}/forum/{id_forum}/comments/{id_forum_comment}/edit]
- R407: Delete comment [/projects/{id_project}/forum/{id_forum}/comments/{id_forum_comment}/delete]

R401	Get Forums
URL	/projects/{id_project}/forum
Description	This web resource gets all the project's forums
Method	GET
Parameters	+id_project: integer - Project id

R401	Get Forums
Response body	JSON401
Permissions	DEV, MNGR
R402	Create forum for a specific topic
URL	/projects/{id_project}/forum/create_forum
Description	This web resource adds a new forum for a specific topic
Method	POST
Parameters	+id_project: integer - Work id
Request Body	+id_user: integer - User id
	+topic: string - Topic name
Returns	200 OK - The forum was successfully created.
	400 Bad Request - Error message is specified via a HTTP header.
	404 Not Found - No project with the specified primary key exists.
Permissions	DEV,MNGR
R403	View forum of a specific topic
URL	/projects/{id_project}/forum/{id_forum}
Description	This web resource displays the a forum of a specific topic
Method	GET
Parameters	+id_project: integer - Project id
	+id_forum: integer - Forum id
UI	UI05
Permissions	DEV, MNGR
R404	Get forum comments
URL	/projects/{id_project}/forum/{id_forum}/comments
Description	This web resource displays the forum's comments.
Method	GET
Parameters	+id_project: integer - Work id
	+id_forum: integer - Forum id
Response body	JSON403
Permissions	DEV, MNGR
R405	Create comment

R405	Create comment
URL	/projects/{id_project}/forum/{id_forum}/create_comment
Description	This web resource adds a new comment to the forum
Method	POST
Parameters	+id_project: integer - Work id
	+id_forum: integer - Forum id
Request Body	+id_user: integer - User id
	+comment: string - Comment text
Returns	200 OK - The comment was successfully added.
	400 Bad Request - Error message is specified via a HTTP header.
	404 Not Found - No project or forum with the specified primary key exists.
Permissions	DEV,MNGR
R406	Edit comment
URL	/projects/{id_project}/forum/{id_forum}/comments/{id_forum_comment}/edit
Description	This web resource edits a comment of the forum
Method	PUT
Parameters	+id_project: integer - Project id
	+id_forum: integer - Forum id
	+id_forum_comment:integer - Comment id
Request Body	+id_user: integer - User id
	+comment: string - Comment text
Returns	200 OK - The comment was successfully edited
	400 Bad Request - Error message is specified via a HTTP header.
	404 Not Found - No project, forum or comment with the specified primary key exists.
Permissions	DEV,MNGR
R407	Delete comment
URL	/projects/{id_project}/forum/{id_forum}/comments/{id_forum_comment}/delete
Description	This web resource deletes a comment of the forum
Method	DELETE
Parameters	+id_project: integer - Work id
	+id_forum: integer - Forum id

R407	Delete comment
	+id_forum_comment - Comment id
Request Body	+id_user: integer - User id
	+comment: string - Comment text
Returns	200 OK - The comment was successfully edited
	400 Bad Request - Error message is specified via a HTTP header.
	404 Not Found - No project, forum or comment with the specified primary key exists.
Permissions	DEV,MNGR

Module M05: User Administration and Static pages

Endpoints of User Administration and Static pages

- R501: Get users [/users]
- R502: Ban user [/users/{id}/ban]
- R503: Reinstate users [/users/{id}/unban]
- R504: Delete project [/projects/{id}/delete]
- R505: Info [/info#about]
- R506: Contacts [/info#contacts]
- R507: FAQ [/info#help]
- R508: 404 [/404]
- R509: Login form [/admin/login]
- R510: Login action [/admin/login]
- R511: Logout action [/admin/logout]

R501	Get users
URL	/users
Description	Get all registered users.
Method	GET
UI	UI08

Permissions	ADM
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R502	Ban user
URL	/users/{id}/ban
Description	This web resource bans a user. It updates an attribute instead of actually deleting the user.
Method	PUT
Parameters	+id: integer - User Id
Returns	200 OK - The user was successfully banned.

R502	Ban user
	400 Bad Request - The error message is specified via an HTTP header.
	404 Not Found - No user with the specified primary key exists.
Permissions	ADM
R503	Ban user
URL	/users/{id}/unban
Description	This web resource unbans a user.
Method	PUT
Parameters	+id: integer - User Id
Returns	200 OK - The user was successfully unbanned.
	400 Bad Request - The error message is specified via an HTTP header.
	404 Not Found - No user with the specified primary key exists.
Permissions	ADM
R504	Ban user
URL	/projects/{id}/delete
Description	This web resource marks a project for deletion. It updates an attribute instead of actually deleting the project.
Method	PUT
Parameters	+id: integer - User Id
Returns	200 OK - The project was successfully deleted.
	400 Bad Request - The error message is specified via an HTTP header.
	404 Not Found - No project with the specified primary key exists.
Permissions	ADM
R505	About
URL	/info#about
Description	Get about page.
Method	GET
UI	UI02
Permissions	MBR
R506	Contact
URL	/info#contact

R506	Contact
Description	Get contact page.
Method	GET
UI	UI02

Permissions	MBR
R507	Contact
URL	/info#faq
Description	Get FAQ page.
Method	GET
UI	UI02
Permissions	MBR

R508	404
URL	/404
Description	Get 404 page.
Method	GET
UI	N/A
Permissions	PUB

R509	Admin login Form
URL	/admin/login
Description	Form that allows the admin to login into its account
Method	GET
UI	UI07
Submit	R510
Permissions	

R510	Admin login action
URL	/admin/login
Description	Logs the admin into its account. Redirects to the admin dashboard on success or back to the form on failure.
Method	POST
UI	UI07
Parameters	+email: string - Admin email

R510	Admin login action
	+password: string - The Admin password
Redirects	UI08 - Success
	R509
Permissions	ADM
R511	Logout action
URL	/admin/logout
Description	Logs the admin out of its account.
Method	POST
UI	UI07
Redirects	UI08 - Success
Permissions	ADM
R512	Get projects
URL	/projects
Description	Get all projects of the database
Method	GET
UI	UI08
Permissions	ADM

4. JSON/XML Types

Some of the described modules require JSON as a response body for their requests. In this section, there's the specification of said JSON/XML Types.

JSON201: Search Projects: {project}[]

```
{
  "project": [
    {
      "id_project": "1",
      "name": "workpad",
      "color": "#000000",
      "date": "19-04-2019",
      "deleted": "false"
    },
    {
      "id_project": "2",
      "name": "project x",
      "color": "#000000",
```

```
    "date": "20-01-2019",  
    "deleted": "true"  
  }  
]  
}
```

JSON301: Search Tasks: {task}[]

```
{  
  "task": [  
    {  
      "id_task": "1",  
      "id_project": "1",  
      "name": "New feature",  
      "description": "Component X needs a new feature",  
      "creation_date": "01-04-2019",  
      "due_date": "01-06-2019"  
    },  
    {  
      "id_task": "2",  
      "id_project": "1",  
      "name": "Another feature feature",  
      "description": "Component X needs a another feature",  
      "creation_date": "02-04-2019",  
      "due_date": "02-06-2019"  
    }  
  ]  
}
```

JSON303: Search Task Checklist: {subtask}[]

```
{  
  "subtask": [  
    {  
      "id_subtask": "1",  
      "id_task": "1",  
      "brief": "Step 1"  
    },  
    {  
      "id_subtask": "2",  
      "id_task": "1",  
      "brief": "Step 2"  
    }  
  ]  
}
```

JSON401: Search Forums: {forum}[]

```
{
  "forum": [
    {
      "id_forum": "1",
      "id_project": "1",
      "topic": "Main Forum"
    },
    {
      "id_forum": "2",
      "id_project": "1",
      "topic": "Feature forum"
    }
  ]
}
```

JSON403: Search Comments: {forum_comment}[]

```
{
  "forum_comment": [
    {
      "id_forum_comment": "1",
      "id_member": "39",
      "id_forum": "15",
      "content": "Avoid using min-widths",
      "date": "19-04-2019"
    },
    {
      "id_forum_comment": "2",
      "id_member": "49",
      "id_forum": "30",
      "content": "We should use min-widths",
      "date": "09-01-2019"
    }
  ]
}
```

Revision history

Changes made to the first submission:

GROUP1863, 17/04/2019

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