

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 includes the following operations over data: create, read, update, and delete.

1. Overview

M01: Authentication and Profile	Web resources associated with the user authentication. It also includes web resources associated with user information such as basic information and addresses.
M02: Products and Categories	Web resource associated with the search, filtering and listing of the products available to the user.
M03: Management Area	Web resources associated with website management, specifically: view and edit purchases, view, edit, add and delete properties, view, edit, add and delete categories and view, add and delete faqs.
M04: Product and Reviews	Web resources associated with the product and its reviews. It also includes web resources associated the adding and editing a product.
M05: Static Pages	Web resources associated with static content/pages, such as: about, contact and faq.
M06: Cart and Wishlist	Web resources associated with the cart and wishlist.

2. Permissions

PUB	Public	Group of users without privileges.
USR	User	Authenticated user.
OWN	Owner	Group of users that can update their profiles and have privileges regarding their purchases and reviews.
ADM	Administrator	Group of administrators.

3. Overview

Module M01: Authentication and Profile

Endpoints

These are the endpoints available in the Authentication and Profile Module.

- R101 - Sign In Form */signin*
- R102 - Sign In Action */signin*
- R103 - Logout Action */logout*
- R104 - Register Form */register*
- R105 - Register Action */login*
- R106 - View Profile */profile/{id}*
- R107 - Edit Profile Form */profile/{id}*
- R108 - Edit Profile Action */profile/{id}*
- R109 - Delete Account Action */profile/{id}*
- R110 - Add Address Form */profile/{id}*
- R111 - Add Address Action */profile/{id}*
- R112 - Delete Address Action */profile/{id}*

R101 - Sign In Form

URL	/signin
Description	Page with a form to sign in to a user account.
Method	GET
UI	UI11 (Sign in page)
Submit	R102
Permissions	PUB

R102 - Sign In Action

URL	/signin	
Description	This web resource logs the user into the system. Redirects to the homepage on success and the login form on failure.	
Method	POST	
Request Body	+email: string	Username
	+password: string	Password
Redirects	UI01 (Homepage)	Success
	UI11 (Sign in page)	Error
Permissions	PUB	

R103 - Logout Action

URL	/logout	
Description	This web resource logs out the authenticated user or admin.	
Method	POST	

Redirects	UI01 (Homepage)	Success
	UI04 (User profile page)	Error
Permissions	USR, ADM	

R104 - Register Form

URL	/register	
Description	Page with a form to register a new user account.	
Method	GET	
UI	UI10 (Register page)	
SUBMIT	R105	
Permissions	PUB	

R105 - Register Action

URL	/login	
Description	This web resource inserts the user into the system. Redirects to the homepage on success and the register form on failure.	
Method	POST	
Request Body	+name: string	Name
	+username: string	Username
	+email: string	Email
	+password: string	Password
	+repeatPassword: string	Repeat Password

Redirects	UI01 (Homepage)	Success
	UI10 (Register page)	Error
Permissions	PUB	

R106 - View Profile

URL	/profile/{id}	
Description	Shows the user individual profile page.	
Method	GET	
Parameters	+id: integer	user primary key
UI	UI04 (User profile page)	
Ajax Call	R112	
Permissions	USR	

R107 - Edit Profile Form

URL	/profile/{id}	
Description	Shows the user individual profile page.	
Method	GET	
Parameters	+id: integer	user primary key
UI	UI04 (User profile page)	
Submit (Ajax Call)	R108	
Permissions	USR	

R108 - Edit Profile Action

URL	/profile/{id}	
Description	Web resource that changes user profile info based on the input received. Shows a message in both cases error or success.	
Method	PUT	
Parameters	+id: integer	user primary key
Request Body	+name: string	Name
	+username: string	Username
	+email: string	Email
	+password: string	Password
	?newPassword: string	New Password
	? newPasswordConfirmation: string	New Password Confirmation
Returns	200 OK	The profile was successfully updated.
	400 Bad Request	Error. Error message is specified via a HTTP header.
	404 Not Found	Error. There's not a user with the specified primary key
Permissions	USR	

R109 - Delete Account Action

URL	/profile/{id}
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Description	This web resource removes the user account from the system. Redirects to the Homepage on success and to the user profile page on failure.	
Method	PUT	
Parameters	+id: integer	user primary key
Redirects	UI01	Success
	UI04 (User profile page)	Error
Permissions	USR	

R110 - Add Address Form

URL	/profile/{id}	
Description	Shows the user individual profile page.	
Method	GET	
Parameters	+id: integer	user primary key
UI	UI04 (User profile page)	
Submit	R111	
Permissions	USR	

R111 - Add Address Action

URL	/profile/{id}	
Description	Web resource that adds an user's address based on the input received. Redirects to the user profile either on success or on failure, showing a message in both cases.	
Method	POST	

Request Body	+name: string	Name
	+streetAddress: string	Street Address
	+zipCode: string	ZIP Code
	+country: string	Country
	+city: string	City
Redirects	UI04 (User profile page)	Success
	UI04 (User profile page)	Error
Permissions	USR	

R112 - Delete Address Action

URL	/profile/{id}	
Description	Web resource that archives an user's address. Redirects to the user profile either on success or on failure, showing a message in both cases.	
Method	PUT	
Parameters	+id: integer	address primary key
Returns	200 OK	The address was successfully updated as archived.
	400 Bad Request	Error. Error message is specified via a HTTP header.
	404 Not Found	Error. There's not an address with the specified primary key
Permissions	USR	

Module M02: Products and Categories

Endpoints

These are the endpoints available in the Products and Categories Module.

- R201 - Homepage products */homepage*
- R202 - Products from a category */products*
- R203 - Search action
- R204 - Navigation bar categories
- R205 - Filter products */products*

R201: Homepage products

URL	<i>/homepage</i>
Description	Get products to display on the homepage
Method	GET
UI	UI01
Permissions	PUB

R202: Products from a category

URL	<i>/products/{category_name}</i>	
Description	Lists all products of the specified category.	
Method	GET	
Parameters	+category_name:string	Category name
UI	UI02	
AJAX Calls	R205	

Permissions PUB

R203: Search action

URL

Description	Searches products similar to the name given - can be accessed anywhere on the website.	
Method	GET	
Parameters	?product_name:string	Product name
Permissions	PUB	

R204: Navigation bar categories

URL

Description	Lists all the categories in the navbar, can be accessed anywhere	
Method	GET	
Permissions	PUB	

R205: Filter products

URL	/products/{category_name}	
Description	Lists all products of the specified category.	
Method	GET	
Parameters	+category_name:string	Category name
	?price:double	Maximum price range

	?brand:string	Product brand
	?property_values:string	Specific characteristic of the products (like storage size)
Response Body	JSON201	
Permissions	PUB	

Module M03: Management Area

Endpoints

These are the endpoints available in the Management Area Module.

- R301 - Admin's page */admin*
- R302 - Update Purchases State Form */admin*
- R303 - Update Purchase's State Action */admin*
- R304 - Delete Property Action */admin*
- R305 - Add Property Form */admin*
- R306 - Add Property Action */admin*
- R307 - Add Category Form */admin*
- R308 - Add Category Action */admin*
- R309 - Delete Category Action */admin*
- R310 - Delete FAQ Action */admin*
- R311 - Update Category's Properties Form */admin*
- R312 - Update Category's Properties Action */admin*
- R313 - Add FAQ Form */admin*
- R314 - Add FAQ Action */admin*
- R315 - Update Navigation Categories Form */admin*
- R316 - Update Navigation Categories Action */admin*

R301 - Admin's page

URL	/admin
Description	Get Management Area page.
Method	GET
UI	UI07
AJAX Calls	R304 R309 R310
Permissions	ADM

R302 - Update Purchases State Form

URL	/admin
Description	Form that updates the purchases state
Method	GET
UI	UI07
Submit (AJAX Call)	R303
Permissions	ADM

R303 - Update Purchase's State Action

URL	/admin
Description	Update purchase's state. The Request Body can have more than one purchase.
Method	PUT
Request Body	+id: integer purchase id
	+status: integer purchase status

Returns	200 OK	Purchases were successfully updated.
	400 Bad Request	Error. Error message is specified via a HTTP header.
	404 Not Found	Error. No purchase with the specified primary key exists.
Permissions	ADM	

R304 - Delete Property Action

URL	/admin	
Description	Delete a certain property.	
Method	DELETE	
Request Body	+id: integer	property id
Returns	200 OK	The property was successfully deleted
	400 Bad Request	Error. Error message is specified via a HTTP header.
	404 Not Found	Error. No property with the specified primary key exists.
Permissions	ADM	

R305 - Add Property Form

URL	/admin	
Description	Modal Box with a form to add a new property.	
Method	GET	

UI	UI07
Submit	R306
Permissions	ADM

R306 - Add Property Action

URL	/admin	
Description	Add Property Redirects to the admin page either on success or on failure, showing a message in case of error.	
Method	POST	
Request Body	+name: string	property's name
Redirects	UI07	Success
	UI07	Error
Permissions	ADM	

R307 - Add Category Form

URL	/admin	
Description	Modal Box with a form to add a new category.	
Method	GET	
UI	UI07	
Submit	R308	
Permissions	ADM	

R308 - Add Category Action

URL	/admin	
Description	Add Category Redirects to the admin page either on success or on failure, showing a message in case of error.	
Method	POST	
Request Body	+name: string	category's name
Redirects	UI07	Success
	UI07	Error
Permissions	ADM	

R309 - Delete Category Action

URL	/admin	
Description	Delete a certain category.	
Method	DELETE	
Request Body	+id: integer	category id
Returns	200 OK	The category was successfully deleted
	400 Bad Request	Error. Error message is specified via a HTTP header.
	404 Not Found	Error. No category with the specified primary key exists.
Permissions	ADM	

R310 - Delete FAQ Action

URL	/admin	
Description	Delete a certain faq.	
Method	DELETE	
Request Body	+id: integer	faq id
Returns	200 OK	The faq was successfully deleted
	400 Bad Request	Error. Error message is specified via a HTTP header.
	404 Not Found	Error. No faq with the specified primary key exists.
Permissions	ADM	

R311 - Update Category's Properties Form

URL	/admin
Description	Form that updates category's properties.
Method	GET
UI	UI07
Submit (AJAX Call)	R312
Permissions	ADM

R312 - Update Category's Properties Action

URL	/admin	
Description	Update category's properties. The Request Body can have more than one property.	
Method	POST	
Request Body	+cat_id: integer	category id
	+property_id: integer	property status
	+is_property_required: boolean	boolean that tells if property is required in this category or not.
Returns	200 OK	The category were successfully updated.
	400 Bad Request	Error. Error message is specified via a HTTP header.
	404 Not Found	Error. No category with the specified primary key exists.
Permissions	ADM	

R313 - Add FAQ Form

URL	/admin
Description	Modal Box with a form to add a new FAQ.
Method	GET
UI	UI07
Submit	R314

Permissions ADM

R314 - Add FAQ Action

URL	/admin	
Description	Add FAQ. Redirects to the admin page either on success or on failure, showing a message in case of error.	
Method	POST	
Request Body	+question: string	FAQ's question
	+answer: string	FAQ's answer
Redirects	UI07	Success
	UI07	Error
Permissions	ADM	

R315 - Update Navigation Categories Form

URL	/admin	
Description	Form that updates which categories are on navigation menu.	
Method	GET	
UI	UI07	
Submit (AJAX Call)	R316	
Permissions	ADM	

R316 - Update Navigation Categories Action

URL	/admin	
Description	Update which categories are on navigation menu. The Request Body can have multiple fields, where each one is a category's id.	
Method	POST	
Request Body	+id: integer	category id
Returns	200 OK	The navigation menu was successfully updated.
	400 Bad Request	Error. Error message is specified via a HTTP header.
	404 Not Found	Error. No category with the specified primary key exists.
Permissions	ADM	

Module M04: Product and Reviews

Endpoints

These are the endpoints available in the Product and Reviews Module.

- R401 - Product Page */product/{id}*
- R402 - Add to Cart Action */product/{id}*
- R403 - Add to Wishlist Action */product/{id}*
- R404 - Add Review Form */product/{id}*
- R405 - Edit Review Form */product/{id}*
- R406 - Add Review Action */product/{id}*
- R407 - Edit Review Action */product/{id}*
- R408 - Delete Review Action */product/{id}*
- R409 - Add Product Form */add_product*

- R410 - Add Product Action */add_product*
- R411 - Edit Product Form */product/{id}/edit*
- R412 - Edit Product Action */product/{id}/edit*

R401: Product Page

URL	<i>/product/{id}</i>	
Description	This web resource displays a single product.	
Method	GET	
Parameters	+id: integer	Product id
UI	UI03	
AJAX Calls	R402	R403
Permissions	PUB	

R402: Add to Cart Action

URL	<i>/product/{id}</i>	
Description	This web resource adds the product to the cart.	
Method	POST	
Parameters	+id: integer	Product id
Returns	200 OK	The product was successfully added to the cart.
	400 Bad Request	Error. Error message is specified via a HTTP header.
	404 Not Found	Error. No product with the specified primary key exists.

Permissions USR

R403: Add to Wishlist Action

URL	/product/{id}	
Description	This web resource adds the product to the wishlist.	
Method	POST	
Parameters	+id: integer	Product id
Returns	200 OK	The product was successfully added to the wishlist.
	400 Bad Request	Error. Error message is specified via a HTTP header.
	404 Not Found	Error. No product with the specified primary key exists.
Permissions	USR	

R404: Add Review Form

URL	/product/{id}	
Description	This web resource displays adding a review to a product.	
Method	GET	
Parameters	+id: integer	Product id
UI	UI03	
SUBMIT	R406	
Permissions	USR	

R405: Edit Review Form

URL	/product/{id}	
Description	This web resource displays the edition of a review of a product.	
Method	GET	
Parameters	+id: integer	Product id
UI	UI03	
SUBMIT	R407	
Permissions	USR	

R406: Add Review Action

URL	/product/{id}	
Description	Web resource that adds a review to a product. Redirects to the product page on success or failure, showing a message in case of error.	
Method	POST	
Parameters	+id: integer	Product id
Request Body	?score: integer	New score
	?title: string	New title
	?content: string	New content
Redirects	UI03	Success
	UI03	Error
Permissions	USR	

R407: Edit Review Action

URL	/product/{id}	
Description	Web resource that edits a review of a product. Redirects to the product page on success or failure, showing a message in case of error.	
Method	PUT	
Parameters	+id: integer	Product id
Request Body	?score: integer	New score
	?title: string	New title
	?content: string	New content
Redirects	UI03	Success
	UI03	Error
Permissions	USR	

R408: Delete Review Action

URL	/product/{id}	
Description	Web resource that deletes a review of a product. Redirects to the product page on success or failure, showing a message in case of error.	
Method	DELETE	
Parameters	+id: integer	Product id
Redirects	UI03	Success
	UI03	Error

Permissions USR/ADM

R409: Add Product Form

URL	/add_product
Description	This web resource displays the add product page.
Method	GET
UI	UI08
SUBMIT	R410
Permissions	ADM

R410: Add Product Action

URL	/add_product	
Description	This web resource creates a product. Redirects to the product page on success or the add product page on failure, showing a message in case of error. It can have multiple photos and properties, each property has a value, which can have multiple as well.	
Method	POST	
Request Body	?name: string	New name
	?price: double	New price
	?quantity: integer	New quantity
	?brand: string	New brand
	?photo: string	New photo
	?property: string	New property

	?value: string	New value
Redirects	UI03	Success
	UI08	Error
Permissions	ADM	

R411: Edit Product Form

URL	/product/{id}/edit	
Description	This web resource displays the edit product page.	
Method	GET	
Parameters	+id: integer	Product id
UI	UI08	
SUBMIT	R412	
Permissions	ADM	

R412: Edit Product Action

URL	/product/{id}/edit	
Description	This web resource edits a product. Redirects to the product page on success or stays on the same page on failure, showing a message in case of error. It can have multiple photos and properties, each property has a value, which can have multiple as well.	
Method	PUT	
	?name: string	New name
	?price: double	New price

Request Body	?quantity: integer	New quantity
	?brand: string	New brand
	?photo: string	New photo
	?property: string	New property
	?value: string	New value
Redirects	UI03	Success
	UI08	Error
Permissions	ADM	

Module M05: Static Pages

Endpoints

These are the endpoints available in the Static Pages Module.

- R501 - FAQ Page */faqs*
- R502 - About Page */about*
- R503 - Contact form */contact*
- R504 - Contact form action */contact*

R501: FAQ page

URL	<i>/faqs</i>
Description	Get FAQ page.
Method	GET
UI	UI13
Permissions	PUB

R502: About Page

URL	/about
Description	Get About page.
Method	GET
UI	UI14
Permissions	PUB

R503: Contact form

URL	/contact
Description	Page with a form to make contact with the website administrators
Method	GET
UI	UI12
SUBMIT	R504
Permissions	PUB

R504: Contact form action

URL	/contact	
Description	Web resource that sends a message to the website administrators. Redirects to the homepage on success and to the contact form page on failure.	
Method	POST	
Request Body	+name:string	Name of the sender
	+email:string	Email of the sender
	+subject:string	Subject of the message

	+message:string	Message content
Redirects	R201	Success
	R503	Error

Permissions PUB

Module M06: Cart and Wishlist

Endpoints

These are the endpoints available in the Cart and Wishlist Module.

- R601 - Cart Form */cart*
- R602 - Cart Checkout Action */cart*
- R603 - Cart Delete Product */cart*
- R604 - Wishlist Page */wishlist*
- R605 - Wishlist Add To Cart Action */wishlist*
- R606 - Wishlist Delete Product */wishlist*

R601: Cart Form

URL	<i>/cart</i>	
Description	This web resource displays the cart.	
Method	GET	
Parameters	+id:integer	User id
AJAX Calls	R602	R603
UI	UI06	
Permissions	USR	

R602: Cart Checkout Action

URL	/cart	
Description	This web resource checks out the cart.	
Method	POST	
Parameters	+total:double	Total amount to pay
	+user_id:integer	Id of the user.
	+id_address:integer	Address id.
	+products_ids:integers	Ids of the products purchased.
	+quantities:integers	Amount of products purchased.
Returns	200 OK	Successful checkout
	400 Bad Request	Error. Error message is specified via a HTTP header.
	404 Not Found	Error.
Permissions	USR	

R603: Cart Delete Product

URL	/cart	
Description	Delete product of cart.	
Method	DELETE	
Parameters	+product_id:integer	ID of the product
	+user_id:integer	ID of the user
	200 OK	The product was successfully

		removed from the cart.
Returns	400 Bad Request	Error. Error message is specified via a HTTP header.
	404 Not Found	Error. No product with the specified primary key exists in the user cart.
Permissions	USR	

R604: Wishlist Page

URL	/wishlist	
Description	This web resource displays the wishlist.	
Method	GET	
Parameters	+id:integer	User id
AJAX Calls	R605	R606
UI	UI05	
Permissions	USR	

R605: Wishlist Add to Cart Action

URL	/wishlist	
Description	This web resource adds a product in the wishlist to the cart.	
Method	POST	
Parameters	+product_id:integer	ID of the product
	+user_id:integer	ID of the user

Returns	200 OK	The product was successfully added to the cart.
	400 Bad Request	Error. Error message is specified via a HTTP header.
	404 Not Found	Error. No product with the specified primary key exists.
Permissions	USR	

R606 - Wishlist Delete Product

URL	/wishlist	
Description	Delete product of wishlist.	
Method	DELETE	
Parameters	+product_id:integer	ID of the product
	+user_id:integer	ID of the user
Returns	200 OK	The product was successfully removed from the wishlist.
	400 Bad Request	Error. Error message is specified via a HTTP header.
	404 Not Found	Error. No product with the specified primary key exists in the user wishlist.
Permissions	USR	

4. JSON/XML Types

The structure of the JSON formatted answers must be documented as

illustrated below.

JSON201: Get filtered products : {products}[]

```
{
  "products": [
    {
      "id": "3",
      "name": "iPhone X",
      "path": "/fotos/iphone.jpg",
      "score": "4.5",
      "price": "1024"
    },
    {
      "id": "5",
      "name": "Samsung Galaxy S9",
      "path": "/fotos/samsungS9.jpg",
      "score": "4",
      "price": "899"
    }
  ]
}
```

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