A7: Web Resources Documentation

Our project features an information system capable of supporting an online store, which would allow users to buy products from a wide range of categories. In this artefact we present its web resources.

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 and Individual Profile	Web resources associated with user authentication and individual profile management, includes the following system features: login/logout, registration, view and edit personal profile information.
M02: Products	Web resources associated with shop items, includes the following system features: items list and search, view and edit item details and delete items.
M03: Reviews and Wish list	Web resources associated with reviews, wish list, includes the following system features: add review, list reviews and delete reviews; add items to wish list and remove items from the wish list;
M04: Cart and Purchase	Web resources associated with cart and purchases, includes the following system features: add items to cart, remove items from the cart, buy items in the cart; view previous purchases, make a purchase.
M05: Chat	Web resources associated with purchases, includes the following system features: view chat messages, send a message.
M06: User Administration and Static pages	Web resources associates with user management, specifically: view and search users, block user accounts, view and change user information, and view system access details for each user. Web resources with static content are associated with this module: about, contact, services and faq (frequently asked questions).

Table 1: Table with the modules type

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 purchase items
OWN	Owner	Group of Users that can edit their profiles and have privileges regarding their items such as products and messages
SPR	Chat Support	Group of Chat Support
BMA	Brand Manager	Group of Brand Managers
ADM	Administrator	Group of administrators

Table 2: Table with the permissions type

3 Modules

3.1 Module M01: Authentication and Individual Profile

3.1.1 Endpoints of Module Authentication and Individual Profile

- R101: Login Form /login

- R102: Login Action /login

- R103: Logout Action /logout

- R104: Register Form /register

- R105: Register Action /register

- R106: View Profile /users/{id_user}

- R107: Edit Profile Form /users/{id_user}/edit

- R108: Edit Profile Action /users/{id_user}

- R109: Homepage /homepage

3.1.2 R101: Login Form

URL	/login
Description	Page with a form to login to a user account.
Method	GET
UI	UI04
SUBMIT	R102
Permissions	PUB

Table 3: Table with R101

3.1.3 R102: Login Action

URL	/login	
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	+username: string	Username
	+password: string	Password
Redirects	R106	Success
	R101	Error
Permissions	PUB	

Table 4: Table with R102

3.1.4 R103: Logout Action

URL	/logout	
Description	This web resource logs out the authenticated user or admin.	
Method	POST	
Redirects	R101	Success
Permissions	USR, SPR, BMA, ADM	

Table 5: Table with R103

3.1.5   R104: Register Form

URL	/register
Description	Page with a form to register a new user account.
Method	GET
UI	UI05
SUBMIT	R105
Permissions	PUB

Table 6: Table with R104

3.1.6   R105: Register Action

URL	/register	
Description	This web resource inserts the user into the system. Redirects to the user homepage on success and the register form on failure.	
Method	POST	
Request Body	+name: string	Name
	+email: string	Email
	+username: string	Username
	+password: string	Password
	+confirmpassword: string	Confirm Password
Redirects	R106	Success
	R104	Error
Permissions	PUB	

Table 7: Table with R105

3.1.7   R106: View Profile

URL	/users/{id_user}	
Description	Shows the user individual profile page.	
Method	GET	
Parameters	+id: integer	user primary key
UI	UI09	
Permissions	OWN	

Table 8: Table with R106

3.1.8   R107: Edit Profile Form

URL	/users/{id_user}/edit	
Description	Page with a form to edit profile info.	
Method	GET	
Parameters	+id: integer	user primary key
UI	UI10	
SUBMIT	R108	
Permissions	OWN	

Table 9: Table with R107

3.1.9 R108: Edit Profile Action

URL	/users/{id_user}/edit	
Description	Web resource that changes user profile info based on the input received. Redirects to the user profile on success and edit profile page on failure.	
Method	POST	
Parameters	+id: integer	user primary key
Request Body	+name: string	Name
	+name: string	Name
	+bithday: date	Birthday
	+email: string	Email
	+nif: integer	NIF
Redirects	R106	Success
	R107	Error
Permissions	OWN	

Table 10: Table with R108

3.1.10 R109: Homepage

URL	/homepage
Description	Initial page shown to the user.
Method	GET
UI	UI01
Permissions	PUB

Table 11: Table with R109

3.2 Module M02: Products

3.2.1 Endpoints of Module Products

- R201: View products /products

- R202: View product /products/product_id

- R203: Add product /products/create

- R204: Edit product Form /products/{product_id}/edit

- R205: Edit product Action /products/{product_id}/edit

- R206: Delete product /products

- R207: Search product /search

3.2.2 R201: View products

URL	/products	
Description	Web resource that lets users and visitors consult all the products by category.	
Method	GET	
Parameters	+id_category	category id
Request Body	JSON201	
UI	UI07	
Permissions	PUB	

Table 12: Table with R201

3.2.3 R202: View product

URL	/products/{product_id}	
Description	Web resource that users, visitors and Brand Manager can see all the specific product and all the details about it.	
Method	GET	
Parameters	+id_product	product id
Ajax Call	R301	
UI	UI06	
Permissions	PUB	

Table 13: Table with R202

3.2.4 R203: Add product

URL	/products/create	
Description	Web resource that allows brand manager add a product and all the details about it, like name, price, descriptions and other relevant information.	
Method	PUT	
Request Body	+name:string	Name
	+quantityInStock:integer	Quantity in Stock
	+price:float	Price
	+modelNumber:integer	Model Number
	+weight:float	Weight
	+imageURL:string	Image URL
	+bigDescription:string	Description
	+shortDescription:string	Short Description
	+name_Brand:string	Brand name
	+name_Category:string	Category name
Redirects	R201	Success.
Permissions	BMA	

Table 14: Table with R203

3.2.5 R204: Edit product Form

URL	/products/{product_id}/edit	
Description	Web resource that allows brand manager edit a product.	
Method	GET	
Parameters	+product_id	Product id
UI	UIXX	
SUBMIT	R205	
Permissions	BMA	

Table 15: Table with R204

3.2.6 R205: Edit product Action

URL	/products/{product_id}/edit	
Description	Web resource that changes a product info based in the input received.	
Method	POST	
Parameters	+product_id	Product id
Request Body	+name:string	Name
	+quantityInStock:integer	Quantity in Stock
	+price:float	Price
	+modelNumber:integer	Model Number
	+weight:float	Weight
	+imageURL:string	Image URL
	+bigDescription:string	Description
	+shortDescription:string	Short Description
	+name_Brand:string	Brand name
	+name_Category:string	Category name
Redirects	R202	Success
	R203	Error
Permissions	BMA	

Table 16: Table with R204

3.2.7 R206: Delete product

URL	/products	
Description	Web resource that allows brand manager delete a product.	
Method	DELETE	
Parameters	product_id	product id
Returns	200	OK The product was successfully removed.
	400	Bad Request Error. Error message is specified via HTTP header.
	404	Not Found Error. No product with the specified primary key exists.
Permissions	BMA	

Table 17: Table with R206

3.2.8 R207: Search product

URL	/search	
Description	Web resource that shows the products whose name or category match the search query received.	
Method	POST	
Request Body	+search_query:string	Search Query
Permissions	PUB	

Table 18: Table with R207

3.3   Module M03: Review and Wishlist

3.3.1   Endpoints of Module Review and Wishlist

- R301: View Product Reviews /products/{id_product}

- R302: Add Review /products/{id_product}/reviews

- R303: View Wishlist /wishlist

- R304: Add to Wishlist /wishlist/items/{id_product}

- R305: Remove from Wishlist /wishlist/items/{id_product}

3.3.2   R301: View Product Reviews

URL	/products/{id_product}/reviews	
Description	This web resource displays the product's reviews.	
Method	GET	
Parameter	+id_product: integer	Product id
Response Body	JSON301	
Permissions	USR, ADM	

Table 19: Table with R301

3.3.3   R302: Add Review

URL	/products/{id_product}/reviews	
Description	This web resource adds a new review.	
Method	PUT	
Request Body	+id_product: integer	Product id
	+id_client: integer	Client id
	+textReview: string	Comment text
	+rating: integer	Rate
	+id_purchase: integer	Purchase id
Returns	200	OK The review was successfully added.
	400	Bad Request Error. Error message is specified via a HTTP header.
	404	Not Found Error. No work with the specified primary key exists.
Permissions	USR	

Table 20: Table with R302

3.3.4   R303: View Wishlist

URL	/wishlist
Description	Show user's wishlist page.
Method	GET
AJAX calls	R305
UI	UI11
Permissions	OWN

Table 21: Table with R303

3.3.5   R304: Add to Wishlist

URL	/wishlist/items/{id_product}	
Description	This web resource adds the product to the wishlist.	
Method	POST	
Parameters	+id_product: 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. Not Found Error. No product or client with the specified primary key exists.
Permissions	OWN	

Table 22: Table with R304

3.3.6   R305: Remove from Wishlist

URL	/wishlist/items/{id_product}	
Description	This web resource removes the product to the wishlist..	
Method	DELETE	
Parameters	+id_product: integer	Product id
Returns	200	OK The product was successfully remove from the wishlist.
	400	Bad Request Error. Error message is specified via a HTTP header.
	404	Not Found Error. Not Found Error. No product or client with the specified primary key exists.
Permissions	OWN	

Table 23: Table with R305

3.4   Module M04: Cart and Purchases

3.4.1   Endpoints of Module Cart and Purchases

- R401: View Cart /cart

- R402: Add to Cart /cart/items/{id_product}

- R403: Remove from Cart /cart/items/{id_product}

- R404: My Purchases /purchases

- R405: Make Purchase /purchases/make

3.4.2 R401: View Cart

URL	/cart
Description	Show client's cart page.
Method	GET
AJAX calls	R403
UI	UI13
Permissions	OWN

Table 24: Table with R401

3.4.3 R402: Add to Cart

URL	/cart/items/{id_product}	
Description	This web resource adds the product to the cart.	
Method	POST	
Parameters	+id_product: integer	Product id
	+id_client: integer	Client 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. Not Found Error. No product or client with the specified primary key exists.
Permissions	OWN	

Table 25: Table with R402

3.4.4 R403: Remove from Cart

URL	/cart/items/{id_product}	
Description	This web resource removes the product to the cart.	
Method	DELETE	
Parameters	+id_product: integer	Product id
Returns	200	OK The product was successfully removed from the cart.
	400	Bad Request Error. Error message is specified via a HTTP header.
	404	Not Found Error. Not Found Error. No product or client with the specified primary key exists.
Permissions	OWN	

Table 26: Table with R403

3.4.5 R404: My Purchases

URL	/purchases
Description	Show's the list of purchases of the client.
Method	GET
UI	UI12
Permissions	OWN

Table 27: Table with R404

3.4.6 R405: Make Purchase

URL	/purchases/make	
Description	Make a purchase	
Method	POST	
Request Body	+id_address: string	Address to ship
	+cost: money	Total price
	+paymentType: string	Type of payment
	+cardNumber: integer	Card number
	+cardName: string	Card name
	+cardExpirationDate: date	Expiration date of the card
	+purchaseDate: date	Date of purchase
	+purchaseState: String	State of the purchase
Returns	200	OK The purchase was successfully created.
	400	Bad Request Error. Error message is specified via a HTTP header.
Permissions	USR	

Table 28: Table with R405

3.5 Module M05: Chat

3.5.1 Endpoints of Chat

- R501: My messages /messages

- R502: Add message /messages

3.5.2 R501: My Messages

URL	/messages
Description	Shows the messages sent and received by the user.
Method	GET
Permissions	OWN

Table 29: Table with R501

3.5.3 R502: Add message

URL	/messages	
Description	This web resource adds the message to the chat.	
Method	POST	
Request Body	message_text: string	Message Text
Returns	200	OK The message was successfully added to the chat.
	400	Bad Request Error. Error message is specified via a HTTP header.
	404	Not Found Error. Not Found Error. No user with the specified primary key exists.
Permissions	OWN	

Table 30: Table with R502

3.6 Module M06: User Administration and Static pages

3.6.1 Endpoints of User Administration and Static pages

- R601: Get users /users

- R602: Consult user profile

- R603: Suspend user /users/{id}/suspend

- R604: Reinstate users /users/{id}/reinstate

- R605: About /about

- R606: FAQ /faq

- R607: Contact Us /contactus

- R608: Terms & Conditions /terms

- R609: 404 /404

3.6.2 R601: Get users /users

URL	/users
Description	Get all registed users.
Method	GET
UI	UI03
Permissions	ADM

Table 31: Table with R601

3.6.3 R602: Consult users /users/id__user

URL	/users
Description	Consult an individual user profile
Method	GET
Parameters	+id__user: integer
Permissions	ADM

Table 32: Table with R602

3.6.4 R603: Suspend user /users/id/suspend

URL	/users/id/suspend	
Description	This web resource suspends an user.	
Method	PUT	
Parameters	+id: integer	user id
Returns	200 OK	The user was successfully suspended.
	400 Bad Request	Error. Error message is specified via a HTTP header.
	404 Not Found	Error. No user with the specified primary key exists.
Permissions	ADM	

Table 33: Table with R603

3.6.5 R604: Reinstate users /users/id/reinstate

URL	/users/id/reinstate	
Description	This web resource reinstates an user.	
Method	PUT	
Parameters	+id: integer	user id
Returns	200 OK	The user was successfully reinstated.
	400 Bad Request	Error. Error message is specified via a HTTP header.
	404 Not Found	Error. No user with the specified primary key exists.
Permissions	ADM	

Table 34: Table with R604

3.6.6 R605: About /about

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

Table 35: Table with R605

3.6.7 R606: FAQ

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

Table 36: Table with R606

3.6.8 R607: Contact Us

URL	/contactus
Description	Get Contact Us page.
Method	GET
UI	UIXX
Permissions	PUB

Table 37: Table with R607

3.6.9   R608: Terms & Conditions

URL	/terms
Description	Get Terms & Conditions page.
Method	GET
UI	UIXX
Permissions	PUB

Table 38: Table with R608

3.6.10   R609: 404 /404

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

Table 39: Table with R609

4 JSON Types

4.1 JSON201: Search Product: {product}[]

```
{
  "product": [
    {
      "id": "1",
          "name": "Gelato",
      "quantityInStock": "10",
      "price": "30",
      "imageURL": "./src/images/brands/alameda_turquesa/01-holi-400x400.jpg",
      "bigDescription": "",
      "shortDescription": "",
      "id_brand": "1",
      "id_category": "1"
    },
    {
      "id": "6",
          "name": "Cardosas",
      "quantityInStock": "10",
      "price": "300",
      "imageURL": "./src/images/brands/alma_de_luce/1.jpg",
      "bigDescription": "",
      "shortDescription": "",
      "id_brand": "3",
      "id_category": "6"
    }
  ]
}
```

4.2 JSON301: Search Review: {review}[]

```
{
  "review": [
    {
            "id_product": "1",
        "id_purchase": "5",
        "id_client":"1",
        "review_date": "2018-04-06",
        "textReview": "Excellent Product",
        "rating": 5
    {
            "id_product": "2",
        "id_purchase": "2",
        "id_client":"2",
        "review_date": "2018-04-02",
        "textReview": "Terrible Product",
        "rating": 1
    }
  ]
}
```

Revision history

Changes made to the first submission:

- Added Owner in Permissions table.

- Changed some resource's permissions from USR to OWN.

- Remmoved parameter {category_id} in *ModuleM02* URL's.

- Eliminated Request Body in *View Product* Resource, *R202*.

- Changed *R204* to *R205*.

- Added curly brackets for the identification of some parameters in the URL that were missing.

- Added Github pages links to interfaces.

- Eliminated *Redirects* To *UI* and substituted it for the appropriate resources.

- Changed *R201* method from *POST* to *GET*.

- Eliminated *Ajax Call* from *R201* to resource that does not exist.

- Changed *R203* name, making it a specific url for the creation of products.

- Added an *Ajax Call* from*R202* to *R301*.

- Eliminated the {id_client} and {id_user} parameters from the pages related to the cart, the purchases and the messages. Now these parameters will be obtained when an user authenticates.

- Added a page in *M06* so that an *administrator* can consult the profile of specific *users*.

- Changed some *R405* parameters to Request Body.

- Added *Homepage*, *Search Product*, *Contact Us* and *Terms & Conditions* pages.

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