

DEPARTMENT OF COMPUTER SCIENCE

Software Engineering

Advanced Web Development



Integrant:

- Tipán Oswaldo
- Fernando Sandoval
- Alexander Villacres

NRC: 22406

Tutor: Mgs. Edison Lascano

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URI's Documentation

- Create Customer

HTTP Method	POST
URI:	http://localhost/barroco/customers
Description	Creates a new customer
Request Parameters	
Json Response	<pre>{ "_id": "string", "phone": "string", "billingAddress": "string", "__v": 0 }</pre>
Status	201 Created
Json File	

- Delete Customer

HTTP Method	DELETE
URI:	http://localhost/barroco/customers/{id}
Description	Deletes a customer
Request Parameters	id (in the path): client ID
Json Response	<pre>{"message":"Customer deleted successfully"}</pre>
Status	200 (OK)
Json File	

- Update Customer

HTTP Method	PUT
URI:	http://localhost/barroco/customers/{id}
Description	Updates an existing customer
Request Parameters	<pre>{"billingAdress":"Updated St","phone":"0988888888"}</pre>
Json Response	<pre>{"message":"Customer updated successfully"}</pre>

Status	200 (OK)
Json File	

- Get Customer

HTTP Method	GET
URI:	http://localhost/barroco/customers/{id}
Description	Retrieves a customer using the provided customer ID.
Request Parameters	id – The ID of the customer
Json Response	<pre>{ "_id": "string", "phone": "string", "billingAddress": "string", "__v": 0 } or { "message": "Customer not found" }</pre>
Status	200 (OK)
Json File	

- Get Customers

HTTP Method	GET
URI:	http://localhost/barroco/customers
Description	Retrieves all customers.
Request Parameters	
Json Response	<pre>[{ "_id": "string", "phone": "string", "billingAddress": "string", "__v": 0 } // ...more costumers]</pre>
Status	200 (OK)

Json File	
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- Create Order

HTTP Method	POST
URI:	http://localhost/barroco/orders
Description	Create a new order
Request Parameters	{"customer": "123", "date": "2024-06-01", "total": 100.00, "status": "PENDING"}
Json Response	{"message": "Order created successfully"}
Status	201 (Created)
Json File	

- Delete Order

HTTP Method	DELETE
URI:	http://localhost/barroco/orders/{id}
Description	Delete an order
Request Parameters	idOrder
Json Response	{"message": "Order deleted successfully"}
Status	200 (OK)
Json File	

- Update Order

HTTP Method	PUT
URI:	http://localhost/barroco/orders/{id}
Description	Update an existing order
Request Parameters	{"status": "DELIVERED"}
Json Response	{"message": "Order updated successfully"}
Status	200 (OK)
Json File	

- Get Order

HTTP Method	GET
URI:	http://localhost/barroco/orders/{id}
Description	Get details of a specific order
Request Parameters	idOrder – Order ID
Json Response	{"idOrder":"123","date":"2024-06-01","status":"SENT","total":120.50}
Status	200 (OK)
Json File	

- Create CartItem

HTTP Method	POST
URI:	http://localhost/barroco/orders
Description	Add a product to the cart
Request Parameters	{"product":"P123","quantity":1,"subtotal":25.00}
Json Response	{"message":"Item added to cart"}
Status	201 (Created)
Json File	

- Delete CartItem

HTTP Method	DELETE
URI:	http://localhost/barroco/cartitems/{id}
Description	Remove an item from the cart
Request Parameters	idItemCar
Json Response	{"message":"Item removed from cart"}
Status	200 (OK)

Json File	
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- Update CartItem

HTTP Method	PUT
URI:	http://localhost/barroco/cartitems/{id}
Description	Update the quantity or subtotal of a cart item
Request Parameters	{"quantity":3,"subtotal":75.00}
Json Response	{"message":"Item updated"}
Status	200 (OK)
Json File	

- Get CartItem

HTTP Method	GET
URI:	http://localhost/barroco/cartitems/{id}
Description	Get item details from the cart
Request Parameters	idItemCar
Json Response	{"idItemCar":"IT001","product":"P123","quantity":2,"subtotal":50.00}
Status	200 (OK)
Json File	

- Create ShoppingCart

HTTP Method	POST
URI:	http://localhost/barroco/shoppingCart
Description	Create a new shopping cart
Request Parameters	{"customer":"123","total":0.00}
Json Response	{"message":"Shopping cart created successfully"}
Status	201 (Created)

Json File	
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- Delete ShoppingCart

HTTP Method	DELETE
URI:	http://localhost/barroco/shoppingCart/{id}
Description	Delete a shopping cart
Request Parameters	idShoppingCar
Json Response	{"message":"Cart deleted successfully"}
Status	200 (OK)
Json File	

- Update ShoppingCart

HTTP Method	PUT
URI:	http://localhost/barroco/shoppingCart/{id}
Description	Update the shopping cart total or customer
Request Parameters	{"total":250.00}
Json Response	{"message":"Cart updated successfully"}
Status	200 (OK)
Json File	

- Get ShoppingCart

HTTP Method	GET
URI:	http://localhost/barroco/shoppingCart/{id}
Description	Retrieve a shopping cart
Request Parameters	idShoppingCar
Json Response	{"idShoppingCar":"SC123","customer":"123","total":200.00}
Status	200 (OK)
Json File	

- Create Administrator

HTTP Method	POST
URI:	http://localhost/barroco/administrators
Description	Creates a new administrator user.
Request Parameters	{ "firstName": "John", "lastName": "Doe", "email": "jdoe@email.com", "password": "securePass123", "role": "admin" }
Json Response	{ "message": "Administrator created successfully" }
Status	201 Created
Json File	

- Delete Administrator

HTTP Method	DELETE
URI:	http://localhost/barroco/administrators/{id}
Description	Deletes an administrator from the system.
Request Parameters	id – ID of the administrator.
Json Response	{ "message": "Administrator deleted successfully" }
Status	200 OK
Json File	

- Update Administrator

HTTP Method	PUT
URI:	http://localhost/barroco/administrators/{id}
Description	Updates administrator profile information.

Request Parameters	{ "firstName": "John", "lastName": "Doe", "email": "jdoe@email.com", }
Json Response	{ "message": "Administrator updated successfully" }
Status	200 OK
Json File	

- Get Administrator

HTTP Method	GET
URI:	http://localhost/barroco/administrators/{id}
Description	Retrieves details of a specific administrator using their ID.
Request Parameters	id – ID of the administrator.
Json Response	{ "idEmployee": "A001", "firstName": "Laura", "lastName": "Cruz", "email": "laura@example.com", "role": "admin" }
Status	200 OK
Json File	

- Create Employees

HTTP Method	POST
URI:	http://localhost/barroco/employees
Description	Register a new employee (e.g. warehouse or sales staff)
Request Parameters	{ "firstName": "John", "lastName": "Doe", "email": "jdoe@email.com", "password": "securepass", }

	"role": "stock" }
Json Response	{ "message": "Employee created successfully" }
Status	201 Created
Json File	

- Delete Employees

HTTP Method	DELETE
URI:	http://localhost/barroco/employees/{id}
Description	Remove an employee from the system
Request Parameters	id – The ID of the Employee
Json Response	{ "message": "Employee deleted successfully" }
Status	200 OK
Json File	

- Update Employees

HTTP Method	PUT
URI:	http://localhost/barroco/employees/{id}
Description	Modify employee details
Request Parameters	{ "role": "sales" }
Json Response	{ "message": "Employee updated successfully" }
Status	200 OK
Json File	

- Get Employees

HTTP Method	GET
URI:	http://localhost/barroco/employees/{id}
Description	View an employee's profile

Request Parameters	idEmployee
Json Response	{ "idEmployee": "EM001", "firstName": "John", "lastName": "Doe", "email": "jdoe@email.com", "role": "stock" }
Status	200 OK
Json File	

- Create Products

HTTP Method	POST
URI:	http://localhost/barroco/products
Description	Create a new ceramic product (e.g. mug, plate, vase)
Request Parameters	{ "name": "Handmade Mug", "description": "Blue ceramic mug with floral pattern", "price": 14.99, "stock": 50, "category": "Mugs", "customizationAvailable": true }
Json Response	{ "message": "Product created successfully" }
Status	201 Created
Json File	

- Delete Products

HTTP Method	DELETE
URI:	http://localhost/barroco/products/{id}
Description	Remove a product from the catalog
Request Parameters	idProduct
Json Response	{ "message": "Product deleted successfully" }
Status	200 OK

Json File	
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- Update Products

HTTP Method	PUT
URI:	http://localhost/barroco/products/{id}
Description	Update product information (e.g. price or stock)
Request Parameters	{ "price": 16.99, "stock": 70 }
Json Response	{ "message": "Product updated successfully" }
Status	200 OK
Json File	

- Get Products

HTTP Method	GET
URI:	http://localhost/barroco/products/{id}
Description	Retrieve details of a specific product
Request Parameters	idProduct
Json Response	{ "idProduct": "P001", "name": "Handmade Mug", "description": "Blue ceramic mug with floral pattern", "price": 14.99, "stock": 50, "category": "Mugs", "customizationAvailable": true }
Status	200 OK
Json File	

- Create Payments

HTTP Method	POST
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URI:	http://localhost/barroco/payments
Description	Create a new payment entry for an order.
Request Parameters	{ "idOrder": 2, "idCustomer": 6, "amount": 77.25, "paymentMethod": "Tarjeta", "status": "Completado" }
Json Response	{ "message": "Payment created successfully", "idPayment": 5 }
Status	201 Created
Json File	

- Delete Payments

HTTP Method	DELETE
URI:	http://localhost/barroco/payments/{idPayment}
Description	Remove a payment record by ID.
Request Parameters	{ "id": 7 }
Json Response	{ "message": "Payment deleted successfully" }
Status	200 (OK)
Json File	

- Update Payments

HTTP Method	PUT
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URI:	http://localhost/barroco/payments/{idPayment}
Description	Update the status or other information of a payment.
Request Parameters	{ "status": "Confirmado" }
Json Response	{ "message": "Payment updated successfully" }
Status	200 (OK)
Json File	

- Get Payments

HTTP Method	GET
URI:	http://localhost/barroco/payments
Description	Get list of payments.
Request Parameters	[{ "idPayment": 1, "amount": 45.99, "status": "Confirmado" }]
Json Response	[{ "idPayment": 1, "idOrder": 1, "amount": 56.50, "method": "Transferencia", "status": "Confirmado" }]
Status	200 (OK)
Json File	

- Create ProductCategory

HTTP Method	POST
URI:	http://localhost/barroco/categories
Description	Creates a new product category.
Request Parameters	<pre>{ "name": "Jars", "description": "Handmade ceramic jars" }</pre>
Json Response	<pre>{ "message": "Category created successfully" }</pre>
Status	201 (Created)
Json File	

- Delete ProductCategory

HTTP Method	DELETE
URI:	http://localhost/barroco/categories/{idCategory}
Description	Deletes a product category.
Request Parameters	None
Json Response	<pre>{ "message": "Category deleted successfully" }</pre>
Status	200 (OK)
Json File	

- Update ProductCategory

HTTP Method	PUT
URI:	http://localhost/barroco/categories/{idCategory}

Description	Updates category details.
Request Parameters	{ "name": "Updated Name", "description": "Updated description" }
Json Response	{ "message": "Category updated successfully" }
Status	200 (OK)
Json File	

- Get ProductCategory

HTTP Method	GET
URI:	http://localhost/barroco/categories
Description	Retrieves all product categories.
Request Parameters	None
Json Response	[{ "idCategory": 1, "name": "Jars", "description": "Ceramic jars" }]
Status	200 (OK)
Json File	

- Create Invoice

HTTP Method	POST
URI:	http://localhost/barroco/invoices
Description	Generate an invoice for a customer's order

Request Parameters	{ "order": "ORD456", "issueDate": "2025-06-22", "totalAmount": 85.00, "tax": 8.50, "discount": 5.00 }
Json Response	{ "message": "Invoice generated successfully" }
Status	201 Created
Json File	

- Delete Invoice

HTTP Method	DELETE
URI:	http://localhost/barroco/invoices/{idInvoices}
Description	Delete a shopping cart
Request Parameters	{ "idShoppingCar" : "" }
Json Response	{"message": "Cart deleted successfully"}
Status	200 (OK)
Json File	

- Update Invoice

HTTP Method	PUT
URI:	http://localhost/barroco/invoices/{idInvoices}
Description	Update the shopping cart total or customer
Request Parameters	{"total": 250.00}
Json Response	{"message": "Cart updated successfully"}
Status	200 (OK)
Json File	

- Get Invoice

HTTP Method	GET
URI:	http://localhost/barroco/invoices/{idInvoices}
Description	View a specific invoice
Request Parameters	idInvoice
Json Response	{ "idInvoice": "INV001", "order": "ORD456", "issueDate": "2025-06-22", "totalAmount": 85.00, "tax": 8.50, "discount": 5.00 }
Status	200 OK
Json File	

URI's Business rule

- Total sales

HTTP Method	GET
URI:	http://localhost/barroco/stats/total-sales
Description	Retrieve the total sales amount from all invoices.
Request Parameters	None
Json Response	{ "totalSales": 5432.50 }
Status	200 OK
Json File	

- Best-selling products

HTTP Method	GET
URI:	http://localhost/barroco/stats/most-sold-products
Description	Retrieve the top 5 most sold products by quantity.

Request Parameters	None
Json Response	{ "topProducts": [{ productId, name, quantity }, ...] }
Status	200 OK
Json File	

- Customers with the most spending

HTTP Method	GET
URI:	http://localhost/barroco/stats/top-customers
Description	Retrieve top customers ranked by total spent.
Request Parameters	none
Json Response	{ "topCustomers": [{ customerId, totalSpent }, ...] }
Status	200 OK
Json File	

- Sales by category

HTTP Method	GET
URI:	http://localhost/barroco/stats/category-sales
Description	Show total sold by product category.
Request Parameters	none
Json Response	{ "categorySales": [{ category, total }, ...] }
Status	200 OK
Json File	

- Monthly income

HTTP Method	GET
URI:	http://localhost/barroco/stats/monthly-income

Description	Return grouped income by month.
Request Parameters	year (opcional, e.g., 2024)
Json Response	{ "monthlyIncome": [{ month: "2024-05", total: 1234.56 }, ...] }
Status	200 OK
Json File	

- Average payments

HTTP Method	GET
URI:	http://localhost/barroco/payment/average-ticket
Description	Return average payment amount.
Request Parameters	None
Json Response	{ "average": 64.25 }
Status	200 OK
Json File	

- Average invoice discounts

HTTP Method	GET
URI:	http://localhost/barroco/invoice/discount-average
Description	Return average discount across all invoices.
Request Parameters	None
Json Response	{ "averageDiscount": 12.15 }
Status	200 OK
Json File	

- Total taxes collected

HTTP Method	GET
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URI:	http://localhost/barroco/invoice/tax-collected
Description	Return total tax collected across all invoices.
Request Parameters	None
Json Response	{ "totalTax": 934.00 }
Status	200 OK
Json File	

- Cart subtotal

HTTP Method	GET
URI:	http://localhost/barroco/cart/{cartId}/subtotal
Description	Return subtotal of a cart.
Request Parameters	cartId (in the URL)
Json Response	{ "subtotal": 104.00 }
Status	200 OK, 404 Not Found
Json File	

- Number of products in an order

HTTP Method	GET
URI:	http://localhost/barroco/order/{orderId}/product-count
Description	Count total products in an order.
Request Parameters	{ "count": 6 }
Json Response	orderId (en la URL)
Status	200 OK, 404 Not Found
Json File	

- Average order value

HTTP Method	GET
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URI:	http://localhost/barroco/order/average-value
Description	Return average order value.
Request Parameters	None
Json Response	{ "averageOrder": 85.50 }
Status	200 OK
Json File	

- Customer's last purchase

HTTP Method	GET
URI:	http://localhost/barroco/customer/{id}/last-purchase
Description	Return latest order made by customer.
Request Parameters	id (en la URL del cliente)
Json Response	{ "orderId": "...", "date": "2024-06-10" }
Status	200 OK, 404 Not Found
Json File	

- Total spent per customer

HTTP Method	GET
URI:	http://localhost/barroco/customer/{id}/total-spent
Description	Return total amount spent by a customer.
Request Parameters	id (in the client URL)
Json Response	{ "totalSpent": 356.80 }
Status	200 OK, 404 Not Found
Json File	

- Customer Loyalty Score

HTTP Method	GET
URI:	http://localhost/barroco/customer/{id}/loyalty-score
Description	Calculate loyalty score based on orders.
Request Parameters	id (in the client URL)
Json Response	{ "score": 89 }
Status	200 OK, 404 Not Found
Json File	

- Stock status of a product

HTTP Method	GET
URI:	http://localhost/barroco/product/{id}/stock-status
Description	Return stock status (OK, low, out).
Request Parameters	id (in the product URL)
Json Response	{ "status": "LOW" }
Status	200 OK, 404 Not Found
Json File	

- Products with low stock

HTTP Method	GET
URI:	http://localhost/barroco/product/low-stock
Description	Return all products under stock threshold.
Request Parameters	threshold (optional, default: 5)
Json Response	[{ "productId": "...", "stock": 3 }, ...]
Status	200 OK
Json File	

- Product sales history

HTTP Method	GET
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URI:	http://localhost/barroco/product/{id}/sales-history
Description	Return sales data grouped by month.
Request Parameters	id (in the product URL) from, to (optional dates for the range)
Json Response	[{ month: "2024-05", sold: 12 }, ...]
Status	200 OK, 404 Not Found
Json File	

- Status of an order

HTTP Method	GET
URI:	http://localhost/barroco/order/{id}/status-history
Description	Return list of status changes on an order.
Request Parameters	id (in the product URL)
Json Response	[{ status: "Enviado", date: "2024-06-15" }, ...]
Status	200 OK, 404 Not Found
Json File	

- Daily summary

HTTP Method	GET
URI:	http://localhost/barroco/reports/daily-summary?date=YYYY-MM-DD
Description	Return daily report: orders, sales, products, payments.
Request Parameters	date
Json Response	{ "orders": 4, "sales": 435.00, "productsSold": 12, ... }
Status	200 OK
Json File	