

ECommerce API Documentation

By Juliana Reider and Andrew Rohrer

Getting Started

The current version of the API lives at <https://localhost:8081> and in AWS at

Versions

Version	Date	Changes
Version 1	10/25/2018	Initial deployment
Version 2	10/26/2018	Change layout and add CreditCard/Order API
Version 3	12/02/2018	HATEOAS and client-side added

Common Flows Through our UI Client

Search -> Login -> Add items to Cart -> Place order -> View orders (click "My Orders") -> View order status -> View order total -> cancel Order

Login-> Search -> Add items to Cart -> Place order -> View orders (click "My Orders") -> View order status -> Cancel order

Login -> View my Orders -> search Items -> Add Item to cart -> Order Item -> Search Items -> Add Items to cart -> place Order -> View Order status

Endpoints

Verb	Endpoint	What It Does/ Domain info Returned	Links Returned (HATEOAS)	Path Parameters	Method Params (Place in the body of request)
Partners Resource					
GET	/partners/{partnerid}	Returns partner Representation based on unique identifier.	Delete partner link	- partnerId: String	N/A
POST	/partners	Register & create partner profile. Returns PartnerRepresentation	Delete partner links	N/A	partnerRequest: PartnerRequest
PUT	/partners/{partnerId} /newProduct	Adds product to partner & Add product to Market place	Delete partner link	partnerID: String	productRequest: ProductRequest
DELETE	/partners/{partnerId}	Deletes Partner by ID	N/A	String id	Status OK
Product Resource					
GET	/products/{productId} }	Returns product Representation based on unique identifier.	Buy link Search Link	productId: String	N/A
GET	/products/searchres	Returns product	Buy link (for each)	Searchterm:	N/A

	ults/{searchterm}	Representations that match the given search term	Search Link	String	
POST	/products	Creates the new product in the database and returns Product Representation based on that new product	N/A	N/A	ProductRequest: ProductRequest
Credit Card Resource					
GET	/creditcard/customer cards?customerID=3	Get all credit cards for a specified customer in the query string	N/A	customerID:String	N/A
GET	/creditcard/customer card?ccNo=<creditcardnumber>	Get specific credit card information	N/A	ccNo:String	N/A
DELETE	/creditcard/creditcard?ccNo=<creditcardnumber>	Delete specific credit card	N/A	ccNo:String	N/A
POST	/creditcard/newcreditcard	Enter new credit card into system	N/A	N/A	ccNum:String ccHolder:String ccExpirationDate:String ccSecurityCode ccCustomerNo
Order Resource					
GET	/order/orderService/	Get all orders for a customer	Cancel Order Link	customerID:	N/A

	orders		Order Status Link Search Links	String	
GET	/order/orderService/ order	Get information for a specific order	Cancel Order Link Order Status Link Search Link	orderId: String	N/A
GET	/order/orderService/ order/fulfillmentAckn owledgeFulfillment{ orderId}	Get fulfilment acknowledgement of a specific order	N/A	orderId:String	N/A
GET	/order/orderService/ order/status?orderI D=3	Get status of an order	Cancel Order Link Order Status Link Search Link	orderId:String	N/A
DELETE	/order/orderService/ order/cancelledorde r?orderId=3	Cancel an order	N/A	orderId:String	N/A
POST	/order/orderService/ order/neworder	Place a new order	Cancel Order Link Order Status Link Search Link	N/A	orderNo: String productsOnOrder: Arraylist of product/quantity of product customerID: String
Customer Resource					
GET	/customers	Get all customers	Delete Customer Links Search Link	N/A	N/A
GET	/customers/{custom erId}	Get a customer by ID	Delete Customer Link Search Link	String: id	N/A

POST	/customers	Add new customer	Delete Customer Link Search Link	N/A	CustomerRequest: customerRequest
POST	/customerAuthentication	Login for customer by their username and password	My Orders Link (<i>access customers list of orders</i>) Delete Customer Link	N/A	CustomerRequest: customerRequest
DELETE	/customers/{customerId}	Deletes customer by ID. Returns status OK	N/A	String: id	N/A

Samples:

Sample code

This is sample javascript code you might have client-side to harness our Restful API and achieve HATEOAS:

```

/*****
* POST METHOD : User authentication
*****/
$("#loginbtn").on("click", function(){
    $.ajax({
        url: customer_Authentication_URI,
        type:"POST",
        data:
            JSON.stringify({
                userName: $("#username").val(),
                password: $("#userpassword").val(),
            }),
        contentType:"application/json; charset=utf-8",

```

```

accept: "application/json",
dataType:"json",
success: function(data, status){
    console.log("This is the status: " + status);
    console.log(data);
    if(data == null){
        alert("Incorrect username or password");
    } else {
        isSignedIn = true;
        hideLoginModal();
        alert("Login Success!");
        var parsedResponse = data;
        var id = parsedResponse.id;
        signedInCustomerNo = id;
        var myOrderURL = data.link[0].url; //grab link from returned data
        console.log("CustomerID: " + id);
        console.log("URI: " + myOrderURL);
        // insert returned URL into menu (links user to their own orders)
        $("#customerorders").attr('custordurl', myOrderURL); //Stored so user to can access their personal orders
    }
}
});
});

```

Sample code

This is sample Java code you might have in your backend to harness our API:

```

/*****
* GET METHOD : Get an existing Partner

```

```
*****/
```

```
//Providers Set up
```

```
List<Object> providers = new ArrayList<Object>();  
JacksonJsonProvider provider = new JacksonJsonProvider();  
provider.addUntouchable(Response.class);  
providers.add(provider);
```

```
System.out.println("GET METHOD .....Get partner with id 17");  
WebClient getClient = WebClient.create("http://localhost:8081", providers);
```

```
//Configuring the CXF logging interceptor for the outgoing message  
WebClient.getConfig(getClient).getOutInterceptors().add(new LoggingOutInterceptor());  
//Configuring the CXF logging interceptor for the incoming response  
WebClient.getConfig(getClient).getInInterceptors().add(new LoggingInInterceptor());
```

```
// set Accept and ContentType headers  
// set path with Partner ID = 17  
getClient = getClient.accept("application/json").type("application/json").path("/partnerservice/partners/17");
```

```
//The following lines are to show how to log messages without the CXF interceptors  
String getRequestURI = getClient.getCurrentURI().toString();  
System.out.println("Client GET METHOD Request URI: " + getRequestURI);  
String getRequestHeaders = getClient.getHeaders().toString();  
System.out.println("Client GET METHOD Request Headers: " + getRequestHeaders);
```

```
//to see as raw XML/json  
String response = getClient.get(String.class);  
System.out.println("GET METHOD Response: ...." + response);
```

```
/******
```

```
* END
```

*****/

Sample Request

URI:

http://localhost:8081/partnerservice/partners/1

Verb:

POST

Headers Example:

Accept:application/xml

Content-Type:application/xml

XML Body:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<partnerRequest>
  <id>0</id>
  <companyName>Fred'sFlowers</companyName>
  <userName>fred</userName>
  <password>flowers</password>
</partnerRequest>
```

Notes on Status Codes:

- If you get a HTTP 400 ; Bad Request Status code response, it's most likely that you tried to access something that does not exist as an api or in our database.

Sample UI:

Opening Page:

Ecommerce Shop		My Orders	Test	Login	<input type="text" value="Search..."/>
<input type="text" value="Item Name"/> <input type="text" value="More info"/>		<input type="text" value="Item Price"/>			
				Shopping Cart	
				<input type="text" value="Item Number"/> <input type="text" value="Item Price"/> <input type="text" value="Qty Ordered"/>	
				<input type="button" value="Place Order"/>	

Search Functionality:

Ecommerce Shop		My Orders	Test	Login	<input type="text" value="googles"/>
<input type="text" value="Item Name"/> <input type="text" value="More info"/>		<input type="text" value="Item Price"/>			
				Shopping Cart	
				<input type="text" value="Item Number"/> <input type="text" value="Item Price"/> <input type="text" value="Qty Ordered"/>	
				<input type="button" value="Place Order"/>	

Login model:

The screenshot shows the 'Ecommerce Shop' interface. At the top, there is a navigation bar with links for 'My Orders', 'Test', and 'Login', along with a search bar. The main content area is titled 'Login' and contains two input fields labeled 'Username...' and 'Password...'. Below these fields are two buttons: a green 'Login' button and a black 'Cancel' button. The page is styled with a grey background and a white login form.

Successful Login:

This screenshot shows the same 'Ecommerce Shop' interface as the previous one, but with a successful login. A white dialog box with a blue border is centered on the screen, displaying the text 'This page says' and 'Login Success!'. Below the text is a blue 'OK' button. The background shows the 'Login' form with the 'Login' button highlighted in green. The browser's address bar and tabs are visible at the top of the window.

My Orders Page:

Ecommerce Shop

My Orders

Test

Login

Search...

Order Number	Order Status	Order Date	Order Total
112	ordered	2/12/2018	<div>Cancel</div> 154
113	shipped	2/12/2018	<div>Cancel</div> 154
114	shipped	2/12/2018	<div>Cancel</div> 154
115	cancelled	2/12/2018	<div>Cancel</div> 154
116	cancelled	2/12/2018	<div>Cancel</div> 154
117	cancelled	2/12/2018	<div>Cancel</div> 154
118	shipped	2/12/2018	<div>Cancel</div> 154
119	shipped	2/12/2018	<div>Cancel</div> 154
120	shipped	2/12/2018	<div>Cancel</div> 154
121	shipped	2/12/2018	<div>Cancel</div> 154
122	shipped	2/12/2018	<div>Cancel</div> 154
123	cancelled	2/12/2018	<div>Cancel</div> 154
124	PushedProductToPartner	2/12/2018	<div>Cancel</div> 154

Shopping Cart

Item Number	Item Price	Qty Ordered
Place Order		