PayPal Vault

Documentation : https://developer.paypal.com/docs/checkout/save-payment-methods/during-purchase/js-sdk/paypal/

Resource :
- Codepen : https://codepen.io/lucaskameleoon/pen/yLWYGWx

A. First time

1. Generate user ID token for payer

```
curl -s -X POST "https://api-m.sandbox.paypal.com/v1/oauth2/token" \
 -u CLIENT_ID:CLIENT_SECRET \
 -H "Content-Type: application/x-www-form-urlencoded" \
 -d "grant_type=client_credentials" \
 -d "response_type=id_token"
```

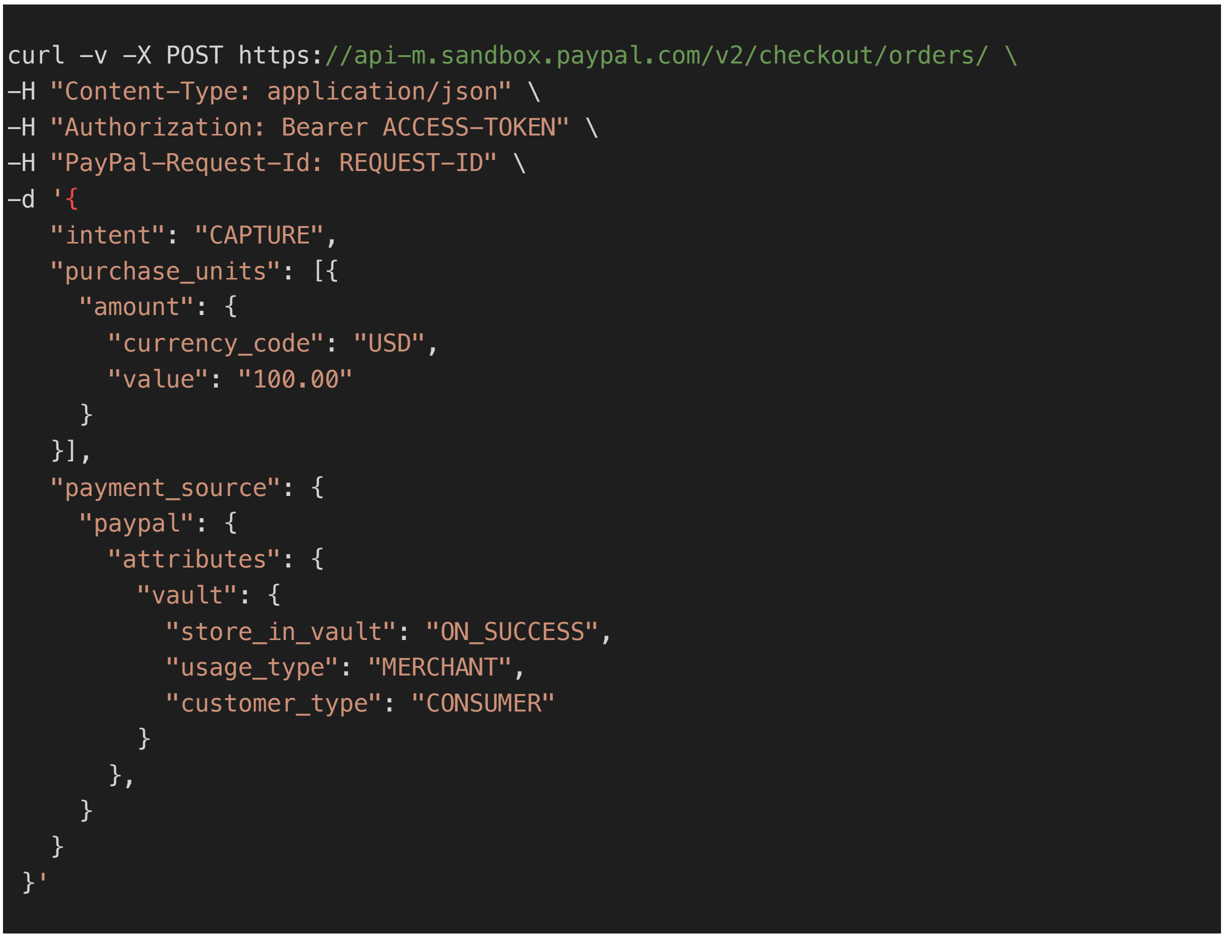
```
{
    "access_token": "A21AAJ--LVQmYlaxd_TDFOqVs4C3Xa7kPfa0Es7O35_9TEWaWRCMw7-
NBJuBWqXZhb3eOolNnMtxwhoMP3NqHOJm1rvPDehfQ",
    "app_id": "APP-80W284485P519543T",
    "expires_in": 32400,
    "id_token":
"eyJraWQiOiJ[...]]hzMrVV5PpTftlB_Xmgzwl1Fir0H0OYSjmopcVPNfXyXl55jxaqJdQ",
    "nonce": "2022-09-27T00:22:30ZxsLQJVSYoAx7jqj1JJgr3onjVSPVL5juzZbId-Z-bwQ",
    "scope": "https://uri.paypal.com/services/invoicing [...] https://api-
m.sandbox.paypal.com/v1/payments/sale/.*/refund",
    "token_type": "Bearer"
}
```

2. Pass user ID token to JavaScript SDK

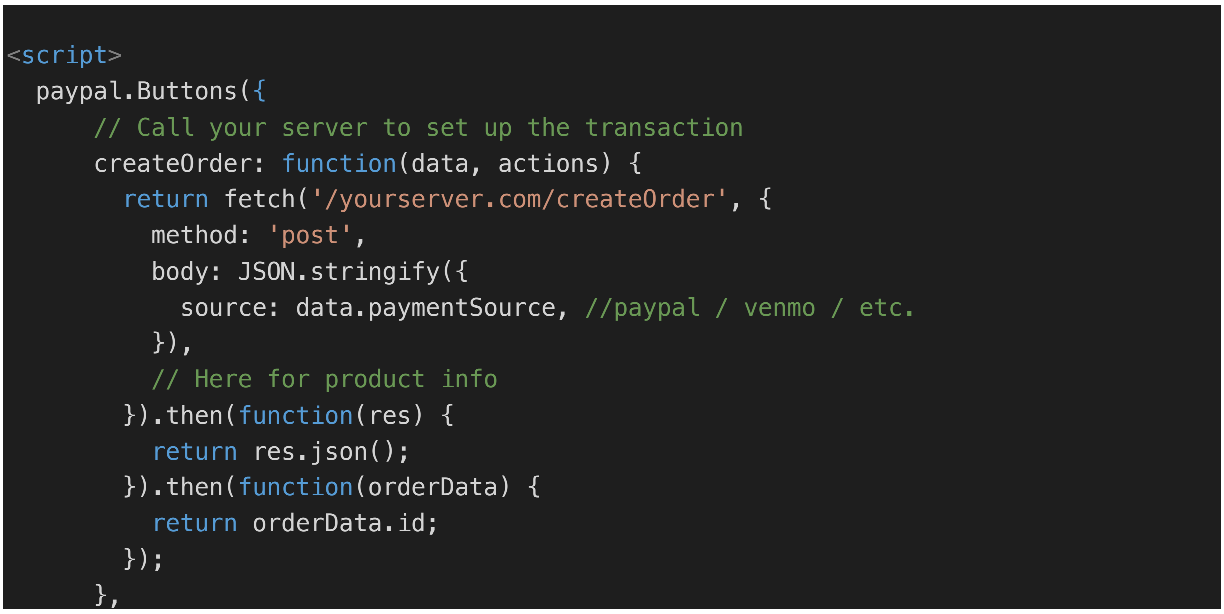
```
<!-- Set up a container element for the button -->
<div id="paypal-button-container"></div>
<!-- Include the PayPal JavaScript SDK. Replace <YOUR_CLIENT_ID> with your client
ID.-->
<script src="https://www.paypal.com/sdk/js?client-id=YOUR_CLIENT_ID" data-user-id-
token="YOUR-ID-TOKEN"></script>
<script>
  // Render the eligible PayPal buttons within the #paypal-button-container
  paypal.Buttons().render('#paypal-button-container')
</script>
```

3. Create order

Create order request (on server side) :



```
curl -v -X POST https://api-m.sandbox.paypal.com/v2/checkout/orders/ \
-H "Content-Type: application/json" \
-H "Authorization: Bearer ACCESS-TOKEN" \
-H "PayPal-Request-Id: REQUEST-ID" \
-d '{
   "intent": "CAPTURE",
   "purchase_units": [{
     "amount": {
       "currency_code": "USD",
       "value": "100.00"
     }
   }],
   "payment_source": {
     "paypal": {
       "attributes": {
         "vault": {
           "store_in_vault": "ON_SUCCESS",
           "usage_type": "MERCHANT",
           "customer_type": "CONSUMER"
         }
       },
     }
   }
 }'
```



```
<script>
  paypal.Buttons({
      // Call your server to set up the transaction
      createOrder: function(data, actions) {
        return fetch('/yourserver.com/createOrder', {
          method: 'post',
          body: JSON.stringify({
            source: data.paymentSource, //paypal / venmo / etc.
          }),
          // Here for product info
        }).then(function(res) {
          return res.json();
        }).then(function(orderData) {
          return orderData.id;
        });
      },
      // Authorize or capture the transaction after payer approves
      onApprove: (data, actions) => {
        return fetch('/yourserver.com/order/' + data.orderID + '/capture/', {
          method: 'post'
        });
      },
      onCancel(data, actions) {
        console.log(`Order Canceled - ID: ${data.orderID}`);
      },
      onError(err) {
        console.error(err);
      }
  }).render('#paypal-button-container');
</script>
```

4. Authorize or Capture the order and retrieve VAULT ID

```
curl -v -X POST https://api-
m.sandbox.paypal.com/v2/checkout/orders/5O190127TN364715T/capture \
-H "Content-Type: application/json" \
-H "Authorization: Bearer ACCESS-TOKEN" \
-d '{}'
```

```
{
    "id": "5O190127TN364715T",
    "status": "COMPLETED",
    "payment_source": {
      "paypal": {
        "attribute": {
          "vault": {
            "id": "3nqvjt3n",
            "customer": {
                "id": "208743798"
            },
            "status": "VAULTED",
            "links": [{
                "href": "https://api-m.sandbox.paypal.com/v3/vault/payment-
tokens/3nqvjt3n",
                "rel": "self",
                "method": "GET"
              },
[…]

  }
```

B. Returning

1. Call oauth2/token with customerID`

```
curl -s -X POST "https://api-m.sandbox.paypal.com/v1/oauth2/token" \
-u CLIENT_ID:CLIENT_SECRET \
-H "Content-Type: application/x-www-form-urlencoded" \
-d "grant_type=client_credentials" \
-d "response_type=id_token" \
-d "target_customer_id=CUSTOMER-ID"
```

2. Create Order for returning

```
{
    "intent": "CAPTURE",
    "purchase_units": [
        {
            "amount": {
                "currency_code": "EUR",
                "value": "333.00"
            },
            "shipping": {
                "type": "SHIPPING",
                "address": {
                    "address_line_1": "1 address test",
                    "postal_code": "75002",
                    "admin_area_2": "Paris",
                    "country_code": "FR"
                }
            }
        }
    ],
    "payment_source": {
        "paypal": {
            "experience_context": {
                "shipping_preference": "SET_PROVIDED_ADDRESS"
            }
        }
    }
}
```