Cash Free Payment Gateway

Document

1. What is CashFree Payment Gateway ?

Cashfree Payment Gateway accepts domestic and international payments, we support a wide range of payment options. You can easily collect payments from your customers using our pre-built checkout integration, or customise the payment flow as per your requirements. You can also use our SDKs to easily integrate your mobile applications with our gateway.

1. What is the role of backend in that ?

Backend Role:

From backend side Create Order API should be made, From this API one request will be sended to cash free payment gateway which includes this details:

Base URL:

For Testing Purpose: <https://sandbox.cashfree.com/pg/orders>

For Production: <https://api.cashfree.com/pg/orders>

Request Format:

curl --request POST \

--url https://sandbox.cashfree.com/pg/orders \

--header 'accept: application/json' \

--header 'content-type: application/json' \

--header 'x-api-version: 2023-08-01' \

--header 'x-client-id: CF10199604CPRC53BHKINF28KR7UU0' \

--header 'x-client-secret: cfsk\_ma\_test\_8da02eeb8bfd5cc0efe43f6323abb13e\_ca858f8c' \

--data '

{

"customer\_details": {

"customer\_id": "customer123",

"customer\_email": "customer@gmail.com",

"customer\_phone": "9638527415",

"customer\_name": "Customer 123"

},

"order\_meta": {

"return\_url": "https://example.com/return?order\_id=order123"

},

"order\_id": "order123",

"order\_amount": 100,

"order\_currency": "INR",

"order\_note": "Payment Description"

}

Request Data Parameters:

x-client-id: Merchant Account App Id

x-client-secret: Merchant Account Secret Key

order\_id: The order ID identifies your order in the system.

order\_amount: The order amount.

order\_note: Order/Payment Description

customer\_id: This is is the identifier for the customer in your system. (Example - customer1234)

customer\_email: Email id of the customer

customer\_phone: Customer phone number. Provide a valid 10 digit phone number.

order\_meta: The meta-object can be used to control payment behaviour

return\_url: This is the URL to which your customers will be redirected to after the payment.

By sending this request from backend it gets one response and it includes below details:

Response Format:

{

cart\_details: null,

cf\_order\_id: '2182684029',

created\_at: '2024-06-25T15:02:31+05:30',

customer\_details: {

customer\_id: 'customer123',

customer\_name: 'Customer 123',

customer\_email: 'customer@gmail.com',

customer\_phone: '9638527415',

customer\_uid: null

},

entity: 'order',

order\_amount: 100,

order\_currency: 'INR',

order\_expiry\_time: '2024-07-25T15:02:31+05:30',

order\_id: 'order123',

order\_meta: {

return\_url: 'https://example.com/return?order\_id=order123',

notify\_url: null,

payment\_methods: null

},

order\_note: 'Payment Description',

order\_splits: [],

order\_status: 'ACTIVE',

order\_tags: null,

payment\_session\_id: 'session\_RMetXAq85cPw1R3mmiGVbUkk1j50trR74wae01D7nmhwbJRTkrdAklW6F\_wM9UOU8UOwrxbcQvcFVFPFyrb519lwTz508tfdawW84JaI67z',

terminal\_data: null

}

After getting this response in backend they sent payment\_session\_id in their create order api response, if successfully request executed otherwise error will be sended in their api response. By using this payment\_session\_id from frontend side user will be ridirected on cashfree payment gateway and after making successful payment user will be redirected to payment status page url which will be given from frontend side and it will be passed order id in parameters fro further process.

After this process one another api will be made from backend which check user payment status, in this base url will be same as given below but request format would be changed and It looks like this:

Base URL:

For Testing Purpose: <https://sandbox.cashfree.com/pg/orders/{order_id}>

For Production: <https://api.cashfree.com/pg/orders/{order_id}>

Request Format:

curl --request GET \

--url https://sandbox.cashfree.com/pg/orders/order123 \

--header 'accept: application/json' \

--header 'x-api-version: 2023-08-01' \

--header 'x-client-id: CF10199604CPRC53BHKINF28KR7UU0' \

--header 'x-client-secret: cfsk\_ma\_test\_8da02eeb8bfd5cc0efe43f6323abb13e\_ca858f8c'

Request Data Parameters:

x-client-id: Merchant Account App Id

x-client-secret: Merchant Account Secret Key

order\_id: The order ID identifies your order in the system.

By sending this request from backend it gets one response and it includes below details:

Response Format:

{

"cf\_order\_id": "594193729",

"entity": "order",

"order\_amount": 1.00

...

"order\_status": "PAID",

...

}

By this response order status will be sended from backend to user payment status check api and based on that user will be redirected to success page or failure page.

1. What is the role of Frontend in that and How it will be implemented from frontend side ?

From frontend side cashfree payment gateway will be implemented by using below steps and cashfree payment gateway documentation strongley recommended that create order/payment and verify order/payment should be implemented from backend side because of security concerns.

After creating create order/payment api and verify order/payment api from backend side follow below steps:

Step 1: Create Order

Creating an order is the first step to integrate Cashfree Payment Gateway. To process any payments, you must create an order first.

Create order/payment api will invoked and required order details and customer details will be passed in body section

From frontend side it looks like this (For Web Projects):

axios

.post(`api/createOrder`, {

UserName: this.user\_name,

UserEmail: this.user\_email,

UserMobile: this.user\_mobile,

OrderAmount: this.amount,

OrderDesc: this.order\_desc,

})

.then((res) => {

console.log("Response From Create Order: ", res);

this.makePayment(res.data.payment\_id);

})

.catch((err) => {

console.log("Error From Create Order: ", err);

});

This api will be called after filled and submitted payment form by user.

Step 2: Open Cashfree Checkout

the next step after creating an order: opening Cashfree checkout.

1. Include JS SDK in your client code:

npm install @cashfreepayments/cashfree-js

Install cashfree sdk in you frontend project using above command.

1. Initialise the SDK:

Initialize it by writing below code at payment form component loading time:

import { load } from "@cashfreepayments/cashfree-js";

data() {

return {

cashfree: null,

};

}

async mounted() {

try {

this.cashfree = await load({ mode: "sandbox" });

} catch (error) {

console.log("Error initializing Cashfree:", error);

}

},

After adding this this code you need to change load mode ‘sandbox’ to ‘production’ if you were going to implement in production, other wise it will be work as testing implementation.

1. Open Cashfree Checkout:

To open the checkout, you can use cashfree.checkout() method. This method can take in following parameters -

paymentSessionId(required)- This is received in the response of Create Order API.

redirectTarget(optional) - This lets you decide how to open the Cashfree Checkout.

makePayment(paymentId) {

if (!this.cashfree) {

console.log("Cashfree SDK not initialized yet");

return;

}

try {

this.cashfree.checkout({

paymentSessionId: paymentId,

redirectTarget: "\_self",

}).then((result) => {

if (result.error) {

console.log("User has closed the popup or there is some payment error, Check for Payment Status");

console.log(result.error);

}

if (result.redirect) {

console.log("Payment will be redirected");

}

if (result.paymentDetails) {

console.log("Payment has been completed, Check for Payment Status");

console.log(result.paymentDetails.paymentMessage);

}

});

} catch (error) {

console.log("Error opening Cashfree checkout:", error);

}

},

Call this function when you get payment\_session\_id in create order api response and pass it as parameter and it will redirected to cash free payment page.

Step 3: Confirm Payment

After getting successful message from cashfree payment gateway it will automatically redirected to return url which provided at order-payment creation time and this will redirect to frontend payment status page,

In this page onloading time verify payment status api invoked which made from backend side and it will show success or failure message based on response from verify payment status api.

mounted() {

this.order\_id = this.$route.params.order\_id;

console.log("Order Id: ", this.order\_id);

axios

.get(`api/status/${this.order\_id}`)

.then((res) => {

console.log("Response of Verifying Order: ", res);

if (res.data.order\_status == "PAID") {

this.successPayment = true;

this.failedPayment = false;

} else {

this.successPayment = false;

this.failedPayment = true;

}

})

.catch((err) => {

console.log("Error From Verifying Order: ", err);

});

},

This Code check payment status at page loading time show success message if payment was success or show failure if any problem occur during payment process or user cancel payment process.

For more details you can check out cashfree payment gateway documentation:

<https://docs.cashfree.com/docs/overview>