

# Payment Gateway

*API Integration Guide*

*Version 3.5*

| Version | Date       | Author        | Note |
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| 3.5     | 24-11-2022 | Huỳnh Hữu Lộc |      |

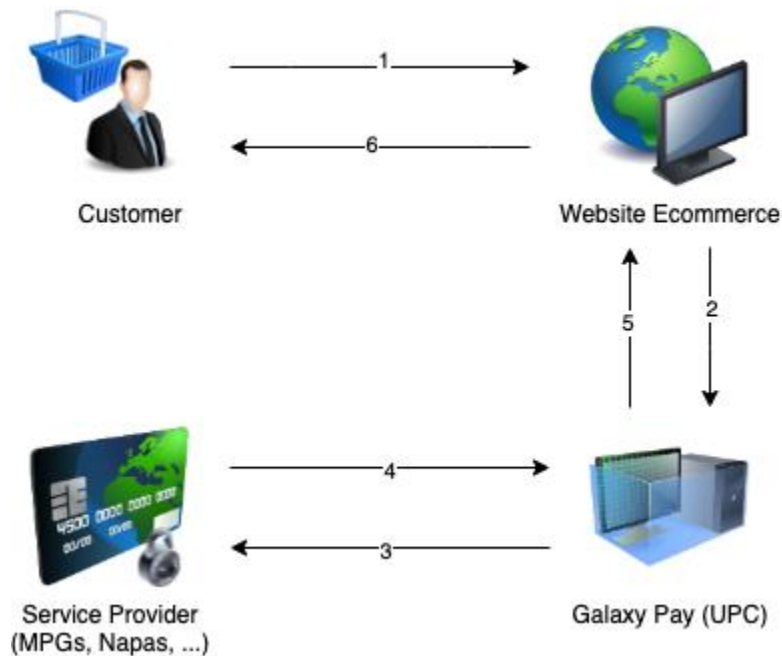
GALAXY PAY

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## 1 Overview

### 1.1 Integration Flow



### 1.2 Demo

| Demo        |      | Link  |
|-------------|------|---|
| Live Demo   |      | <a href="https://uat-merchant.galaxypay.vn">https://uat-merchant.galaxypay.vn</a>                               |
| Source Demo | .NET | <a href="https://github.com/galaxypayvn/sample-upc-dotnet">https://github.com/galaxypayvn/sample-upc-dotnet</a> |
|             |      |   |

### 1.3 Message Structure

- Service: REST API
- HTTP Method: POST
- Content Type: application/json

The request structure:

| # | Component      | Level | Param            | Description   |
|---|----------------|-------|------------------|---|
| 1 | Request Header | L1    | <b>APIKey</b>    | Key for authentication request. Provided by <b>GALAXY PAY</b> . |
| 2 |                | L1    | <b>Signature</b> | Request signature, created with <b>SHA256 &amp; Salt</b>        |
| 3 |                | L1    | Accept           | Accept encoding: <b>application/json</b>                        |
| 4 |                | L1    | Content-Type     | Request content type: <b>application/json</b>                   |
| 5 | Request Body   | L1    |                  | Content of request  |

### 1.4 Integration Keys

| Name                              | Value   | Note                        |
|-----------------------------------|---|-----------------------------|
| Endpoint for API Pay              | <a href="https://uat-secure.galaxypay.vn/pay">https://uat-secure.galaxypay.vn/pay</a>                     | Use for UAT only            |
| Endpoint for API Pay With Options | <a href="https://uat-secure.galaxypay.vn/payWithOption">https://uat-secure.galaxypay.vn/payWithOption</a> | Use for UAT only            |
| SHA 256 Salt                      | <b>GALAXY PAY</b> will provide detail when integration  | Use for Signature/Checksum  |
| API Key                           | <b>GALAXY PAY</b> will provide detail when integration  | Use in Request authenticate |

## 1.5 Response Code Table

| Response Code | Description                                |
|---------------|--|
| 200           | Success                                    |
| 400           | Bad Request due to missing required fields |
| 401           | Unauthorized (Invalid Merchant Key)        |
| 408           | Request Expired                            |
| 409           | Duplicate Request                          |
| 499           | Cancel by User                             |
| 504           | Request Timeout                            |

## 1.6 Signature Algorithm

- Apply hash algorithm **SHA256** with **Salt**.

**Signature = SHA256(SignData + Salt)**

**Example:**

|                            |  |
|----------------------------|--|
| Salt                       | <b>GO@2021</b>   |
| JSON Data                  | <pre>{   "requestID": "14653fa1-2f69-4f4f-9d4b-240e1bebbdf3",   "requestDateTime": 20220426083322,   "requestData": {     "orderID": "2a43e4b9-c5df-49e6-8b18-42af9bcd150e",     "orderNumber": 205249008064,     "orderAmount": 100000,     "orderCurrency": "VND",     "orderDateTime": 20220426083322,     "orderDescription": "DEMO TRANSACTION",     "cardType": "atm",     "bank": "970437",     "otp": "on",     "request": "purchase",     "token": "",     "language": "vi"   } }</pre> |
| Sign Data<br>(JSON String) | <pre>{"requestID":"14653fa1-2f69-4f4f-9d4b-240e1bebbdf3","requestDateTime":20220426083322,"requestData":{"orderID":"2a43e4b9-c5df-49e6-8b18-42af9bcd150e","orderNumber":205249008064,"orderAmount":100000,"orderCurrency":"VND","orderDateTime":20220426083322,"orderDescription":"DEMO TRANSACTION","cardType":"atm","bank":"970437","otp":"on","request":"purchase","token":"","language":"vi"}}</pre>   |
| Signature                  | ca1421b4227600b2ef1803d9401625a36e8e37fe8ef285268ce02192a954d7e9   |

## 1.7 Currencies Table

| Currency          | Code |
|-------------------|------|
| Vietnam Dong      | VND  |
| US Dollar         | USD  |
| Thai Baht         | THB  |
| Japanese Yen      | JPY  |
| India Rupee       | INR  |
| Taiwan Dollar     | TWD  |
| Ringit Malaysia   | MYR  |
| Singapore Dolar   | SGD  |
| South Korean Won  | KRW  |
| Riel Cambodia     | KHR  |
| Kyat Myanmar      | MMK  |
| Indonesia Rupiah  | IDR  |
| Dollar Hongkong   | HKD  |
| Ren Min Bi        | CNY  |
| Australian dollar | AUD  |

## 1.8 eWallet Table

| eWallet          | Code    |
|------------------|---------|
| MoMo eWallet     | MOMO    |
| GPay eWallet     | GPAY    |
| Zalo Pay eWallet | ZALOPAY |

## 1.9 Payment Hubs Table

| Hub      | Code |
|----------|------|
| 2C2P Hub | 2C2P |

## 1.10 International Card Scheme Table

| Card Scheme      | Code   |
|------------------|--------|
| Visa             | VISA   |
| Master           | MASTER |
| JCB              | JCB    |
| American Express | AMEX   |

## 1.11 Domestic Bank Table

| Viet Nam Local Banks                                   | Code       |
|--|------------|
| Ngân hàng TMCP Sài Gòn Công Thương                     | SAIGONBANK |
| Ngân hàng TMCP Sài Gòn Thương Tín                      | SACOMBANK  |
| Ngân hàng Nông nghiệp và Phát triển Nông thôn Việt Nam | AGRIBANK   |
| Ngân hàng TMCP Đông Á                                  | DONGABANK  |



|  |             |
|--|-------------|
| Ngân hàng TMCP Kỹ Thương                       | TECHCOMBANK |
| Ngân hàng Thương mại TNHH MTV Dầu Khí Toàn Cầu | GPBANK      |
| Ngân hàng TMCP Bắc Á                           | BACABANK    |
| Ngân hàng TMCP Đại Chúng Việt Nam              | PVCOMBANK   |
| Ngân hàng TNHH MTV Đại Dương                   | OCEANBANK   |
| Ngân hàng TMCP Công Thương Việt Nam            | VIETINBANK  |
| Ngân hàng TMCP Á Châu                          | ACB         |
| Ngân hàng Đầu tư và Phát triển Việt Nam        | BIDV        |
| Ngân hàng TMCP Quốc Dân                        | NCB         |
| Ngân hàng liên doanh Việt Nga                  | VRB         |
| Ngân hàng TMCP Quân Đội                        | MB          |
| Ngân hàng TMCP Tiên Phong                      | TPBANK      |
| Ngân hàng TNHH MTV Shinhan Việt Nam            | SHINHANBANK |
| Ngân hàng TMCP An Bình                         | ABBANK      |
| Ngân hàng TMCP Hàng Hải Việt Nam               | MSB         |
| Ngân hàng TMCP Việt Á                          | VIETABANK   |
| Ngân hàng TMCP Nam Á                           | NAMABANK    |
| Ngân hàng TMCP Sài Gòn                         | SCB         |
| Ngân hàng TMCP Xăng dầu Petrolimex             | PGBANK      |
| Ngân hàng TMCP Xuất Nhập khẩu Việt Nam         | EXIMBANK    |
| Ngân hàng TMCP Việt Nam Thịnh Vượng            | VPBANK      |
| Ngân hàng TMCP Việt Nam Thương Tín             | VIETBANK    |
| Ngân hàng TNHH Indovina                        | IVB         |

|   |                  |
|---|------------------|
| Ngân hàng TMCP Ngoại thương Việt Nam              | VIETCOMBANK      |
| Ngân hàng TMCP Phát Triển Thành Phố Hồ Chí Minh   | HDBANK           |
| Ngân hàng TMCP Bảo Việt                           | BAOVIETBANK      |
| Ngân hàng TNHH MTV Public Việt Nam                | PUBLICBANK       |
| Ngân hàng TMCP Đông Nam Á                         | SEABANK          |
| Ngân hàng TMCP Quốc Tế Việt Nam                   | VIB              |
| Ngân hàng TNHH MTV Hong Leong Việt Nam            | HONGLEONGBANK    |
| Ngân hàng TMCP Sài Gòn - Hà Nội                   | SHB              |
| Ngân hàng TMCP Phương Đông                        | OCB              |
| Ngân hàng TMCP Bưu Điện Liên Việt                 | LIENVIETPOSTBANK |
| Ngân hàng TMCP Kiên Long                          | KIENLONGBANK     |
| Ngân hàng TMCP Bản Việt                           | VIETCAPITALBANK  |
| Ngân Hàng Hana                                    | KEBHANA          |
| Ngân hàng Woori Bank Việt Nam                     | WOORIBANK        |
| Ngân hàng UOB Việt Nam                            | UOB              |
| Công ty Tài chính cổ phần Tín Việt                | VIETCREDIT       |
| Công ty Tài chính TNHH MTV Mirae Asset (Việt Nam) | MAFC             |

## 1.12 Card Test Information

### 1.12.1 International (via MPGs)

| Card Number      | Expiry Date | CVV | 3DS Secure |
|------------------|-------------|-----|------------|
| 5506920809243667 | 01 / 39     | 100 | Y          |
| 4012000033330026 | 01 / 39     | 100 | N          |

### 1.12.2 International (via Cybersource)

| Card Number      | Expiry Date | CVV | 3DS Secure |
|------------------|-------------|-----|------------|
| 4456530000001096 | 12 / 30     | 111 | Y          |
| 4456530000000064 | 12 / 30     | 111 | N          |

### 1.12.3 Viet Nam Domestic (via Napas)

| Card Number      | Card Holder Name | Issue Date / Expiry Date | OTP (Permanent) |
|------------------|------------------|--------------------------|-----------------|
| 9704000000000018 | Nguyen Van A     | 03/07                    | otp             |

## 2 API Specification

### 2.1 Definition Table

| Definition    | Remark   |
|---------------|--|
| Mandatory (M) | Required when call API   |
| Optional (O)  | DOT NOT Required when call API   |
| Condition (C) | Base on Condition of another field when call API, that field can be Required or Optional |

### 2.2 Data Format

| Definition   | Remark   |
|--------------|--|
| Alpha        | String data, including capital letters (A-Z), usually (a-z)          |
| Numeric      | Numeric data, consisting only of numeric characters (0-9)            |
| Alphanumeric | Numeric data, including uppercase, lowercase, and numeric characters |
| JSON Object  | JSON object data   |
| JSON Array   | JSON array data  |

## 2.3 API Pay

Use to create a simple payment request to GALAXY PAY.

URL: <https://uat-secure.galaxypay.vn/pay>

### 2.3.1 Request Message

| Header |                    |              |        |          |  |
|--------|--------------------|--------------|--------|----------|--|
| Level  | Field Name         | Data Type    | Length | Required | Description  |
| 1      | apiKey             | Alphanumeric |        | M        | Request authenticate   |
| 1      | signature          | Alphanumeric |        | M        | Request signature  |
| Body   |                    |              |        |          |  |
| Level  | Field Name         | Data Type    | Length | Required | Description  |
| 1      | requestID          | Alphanumeric | 50     | M        | Unique ID for each transaction request<br>Recommend: <b>GUID</b>   |
| 1      | requestDateTime    | Numeric      | 14     | M        | <b>yyyyMMddHHmmss</b>  |
| 1      | <b>requestData</b> | JSON Object  |        |          |  |
| 2      | apiOperation       | Alpha        | 20     | M        | Set default value: <b>PAY</b>  |
| 2      | orderId            | Alphanumeric | 50     | M        | Transaction ID at Merchant   |
| 2      | orderNumber        | Alphanumeric | 20     | O        | Order Number or Bill Number  |
| 2      | orderAmount        | Numeric      | 16     | M        | Transaction Amount   |
| 2      | orderCurrency      | Alpha        | 3      | M        | Send the code in <b>Currencies Table</b>   |
| 2      | orderDateTime      | Numeric      | 14     | M        | <b>yyyyMMddHHmmss</b>  |
| 2      | orderDescription   | Alphanumeric | 250    | M        | Transaction Description  |
| 2      | paymentMethod      | Alpha        | 20     | M        | <b>DOMESTIC   INTERNATIONAL   WALLET   HUB</b><br><br>DOMESTIC: VietNam Local Card<br>INTERNATIONAL: International Card<br>WALLET: MoMo ewallet, Zalo Pay ewallet...<br>HUB: Payment hub...  |
| 2      | sourceType         | Alphanumeric | 20     | O        | Can leave it blank or set the value corresponding to the payment method.<br><br>When <b>paymentMethod = DOMESTIC</b><br>Send the code in <b>Domestic Bank Table</b><br>...<br>When <b>paymentMethod = INTERNATIONAL</b><br>Send the code in <b>International Card Scheme Table</b><br>...<br>When <b>paymentMethod = WALLET</b><br>Send the code in <b>eWallet Table</b><br>...<br>When <b>paymentMethod = HUB</b><br>Send the code in <b>Payment Hubs Table</b> |

|   |                       |              |     |   |   |
|---|-----------------------|--------------|-----|---|---|
| 2 | language              | Alpha        | 2   | M | vi or en<br>vi: Vietnamese<br>en: English         |
| 2 | successURL            | Alphanumeric | 500 | O | Callback URL when Payment is success              |
| 2 | failureURL            | Alphanumeric | 500 | O | Callback URL when Payment is failure              |
| 2 | cancelURL             | Alphanumeric | 500 | O | Callback URL when Customer cancel                 |
| 2 | ipnURL                | Alphanumeric | 500 | O | IPN URL   |
| 2 | cardNumber            | Numeric      | 19  | O | Use for Hosted Merchant only                      |
| 2 | cardHolderName        | Alphanumeric | 19  | O | Use for Hosted Merchant only                      |
| 2 | cardExpireDate        | Alphanumeric | 5   | O | Use for Hosted Merchant only<br>Format: MM/YY     |
| 2 | cardVerificationValue | Numeric      | 3   | O | Use for Hosted Merchant only<br>CVV/CVC           |
| 2 | extraData             | JSON Object  |     | O | Extra data  |
| 3 | customer              | JSON Object  |     | O | Customer information                              |
| 4 | firstName             | Alphanumeric | 50  | O | Customer first name                               |
| 4 | lastName              | Alphanumeric | 50  | O | Customer last name                                |
| 4 | identityNumber        | Numeric      | 50  | O | Customer national ID                              |
| 4 | email                 | Alphanumeric | 50  | O | Customer email                                    |
| 4 | phoneNumber           | Numeric      | 50  | O | Customer phone number                             |
| 4 | phoneType             | Alpha        | 1   | O | Customer phone type<br>F: Fixed-line or M: Mobile |
| 4 | gender                | Alpha        | 1   | O | Customer gender<br>M: Male, F: Female             |
| 4 | dateOfBirth           | Numeric      | 8   | O | Customer birth day<br>yyyyMMdd                    |
| 4 | title                 | Alphanumeric | 50  | O | Customer title                                    |
| 3 | device                |              |     | O | Device information                                |
| 4 | browser               | Alphanumeric | 50  | O | Browser information                               |
| 4 | fingerprint           | Alphanumeric | 100 | O | Unique identifier for the device                  |
| 4 | hostName              | Alphanumeric | 50  | O | The name of merchant server                       |
| 4 | ipAddress             | Alphanumeric | 50  | O | The ip address of merchant server                 |
| 4 | deviceId              | Alphanumeric | 50  | O | Mobile device identifier                          |
| 4 | deviceModel           | Alphanumeric | 50  | O | Mobile device model                               |
| 3 | application           |              |     | O | Application information                           |

|   |                    |              |    |   |  |
|---|--------------------|--------------|----|---|--|
| 4 | applicationID      | Alphanumeric | 50 | O | Application Identifier                         |
| 4 | applicationChannel | Alpha        | 50 | O | Application channel<br><b>Mobile, Web, POS</b> |
| 3 | airline            |              |    | O | Airline information                            |
| 4 | recordLocator      | Alphanumeric | 50 | O | Passenger name record (PNR)                    |
| 4 | journeyType        | Numeric      | 1  | O | Oneway: 1,<br>Roundtrip: 2                     |
| 4 | departureAirPort   | Alphanumeric | 50 | O | Departure air port                             |
| 4 | departureDateTime  | Numeric      | 14 | O | Departure date time<br><b>yyyyMMddHHmmss</b>   |
| 4 | arrivalAirPort     | Alphanumeric | 50 | O | Arrival air port                               |
| 4 | arrivalDateTime    | Numeric      | 14 | O | Arrival date time                              |
| 4 | services           | JSON Array   |    | O | Airline services information                   |
| 5 | serviceCode        | Alphanumeric | 50 | O | Service code                                   |
| 5 | quantity           | Numeric      | 10 | O | Service quantity                               |
| 5 | amount             | Numeric      | 16 | O | Service amount                                 |
| 5 | tax                | Numeric      | 6  | O | Service tax                                    |
| 5 | fee                | Numeric      | 6  | O | Service fee                                    |
| 5 | currency           | Alpha        | 3  | O | Service amount currency<br><b>VND or USD</b>   |
| 4 | flights            | JSON Array   |    | O | Airline flights information                    |
| 5 | airlineCode        | Alphanumeric | 50 | O | Airline code                                   |
| 5 | carrierCode        | Alphanumeric | 50 | O | Carrier code                                   |
| 5 | flightNumber       | Numeric      | 50 | O | Flight number                                  |
| 5 | travelClass        | Alphanumeric | 50 | O | Class of service                               |
| 5 | departureAirPort   | Alphanumeric | 50 | O | Departure air port                             |
| 5 | departureDate      | Numeric      | 50 | O | Departure date<br>yyyyMMdd                     |
| 5 | departureTime      | Numeric      | 50 | O | Departure time<br>HHmmss                       |
| 5 | departureTax       | Numeric      | 50 | O | Departure tax                                  |
| 5 | arrivalAirPort     | Alphanumeric | 50 | O | Arrival air port                               |
| 5 | arrivalDate        | Numeric      | 50 | O | Arrival air port                               |
| 5 | arrivalTime        | Numeric      | 50 | O | Arrival date<br>yyyyMMdd                       |
| 5 | fees               | Numeric      | 50 | O | Total fees                                     |

|   |                |              |    |   |   |
|---|----------------|--------------|----|---|---|
| 5 | taxes          | Numeric      | 50 | O | Total taxes   |
| 5 | fares          | Numeric      | 50 | O | Total fares   |
| 5 | fareBasicCode  | Alphanumeric | 50 | O | Code defining rules forming the basic of fare.        |
| 5 | originCountry  | Alpha        | 2  | O | Country code of the country of origin for the flight. |
| 4 | passengers     | JSON Array   |    | O | Airline passengers information                        |
| 5 | passengerID    | Alphanumeric | 50 | O | Passenger ID or Passport                              |
| 5 | passengerType  | Alphanumeric | 50 | O | Adult: ADT,<br>Children: CHD,<br>Infant: INF          |
| 5 | firstName      | Alphanumeric | 50 | O | Passenger first name                                  |
| 5 | lastName       | Alphanumeric | 50 | O | Passenger last name                                   |
| 5 | title          | Alphanumeric | 50 | O | Passenger title                                       |
| 5 | gender         | Alpha        | 1  | O | Passenger gender                                      |
| 5 | dateOfBirth    | Numeric      | 14 | O | Passenger birth day<br>yyyyMMddHHmmss                 |
| 5 | identityNumber | Alphanumeric | 50 | O | Passenger national ID                                 |
| 5 | nameInPNR      | Alphanumeric | 50 | O | Name in PNR   |
| 5 | memberTicket   | Alphanumeric | 50 | O | Member ticket ID                                      |
| 3 | billing        | JSON Object  |    | O | Billing address information                           |
| 4 | countryCode    | Alpha        | 2  | O | Billing country                                       |
| 4 | stateProvince  | Alphanumeric | 50 | O | Billing state/province                                |
| 4 | cityName       | Alphanumeric | 50 | O | Billing city  |
| 4 | postalCode     | Alphanumeric | 50 | O | Billing postal code                                   |
| 4 | streetNumber   | Alphanumeric | 50 | O | Billing street number                                 |
| 4 | addressLine1   | Alphanumeric | 50 | O | Billing address line 1                                |
| 4 | addressLine2   | Alphanumeric | 50 | O | Billing address line 1                                |

#### Example

```
{
  "requestID": "14653fa1-2f69-4f4f-9d4b-240e1bebbdf3",
  "requestDateTime": 20220426083322,
  "requestData": {
    "orderID": "2a43e4b9-c5df-49e6-8b18-42af9bcd150e",
    "orderNumber": 205249008064,
    "orderAmount": 100000,
    "orderCurrency": "VND",
    "orderDateTime": 20220426083322,
    "orderDescription": "DEMO TRANSACTION",
    "cardType": "atm",
    "bank": "970437",
    "otp": "on",
    "request": "purchase",
    "token": ""
  }
}
```



```

"language": "vi",
"extraData": {
  "customer": {
    "firstName": "Luca",
    "lastName": "Joshua",
    "identityNumber": "6587729673",
    "email": "William@outlook.com",
    "phoneNumber": "0598961097",
    "phoneType": "15oBj0MfIo",
    "gender": "M",
    "dateOfBirth": "19990716",
    "title": "Mr"
  },
  "device": {
    "browser": "QJc2njSA0f",
    "fingerprint": "hA05iBWrRE",
    "hostName": "tKlUfI0PSy",
    "ipAddress": "XGInpbefIV",
    "deviceID": "NzoBA2ys2y",
    "deviceModel": "yB0pcSWt1C"
  },
  "application": {
    "applicationID": "KbPCc8eSXH",
    "applicationChannel": "Mobile"
  },
  "airline": {
    "recordLocator": "taiytAvAbH",
    "journeyType": 630351972,
    "departureAirport": "0GwfbyTgKQ",
    "departureDateTime": "26/04/2022 09:33:28",
    "arrivalAirport": "Z7oMrnXLyV",
    "arrivalDateTime": "26/04/2022 07:49:17",
    "services": [{
      "serviceCode": "CNm3xWF0BN",
      "quantity": 2080236449,
      "amount": 90000,
      "tax": 0,
      "fee": 20000,
      "totalAmount": 90000,
      "currency": "USD"
    }
  ],
  "flights": [{
    "airlineCode": "iwx0OR6FdH",
    "carrierCode": "u0zkYneyc4",
    "flightNumber": 2094437388,
    "travelClass": "F7nh7Sq3h0",
    "departureAirport": "kaUCOr4fIu",
    "departureDate": "nTTK014KMw",
    "departureTime": "26/04/2022 05:18:41",
    "departureTax": "PPKh18CuOL",
    "arrivalAirport": "9ngCTN12RX",
    "arrivalDate": "J7dPrCJhG4",
    "arrivalTime": "26/04/2022 01:50:58",
    "fees": 10000,
    "taxes": 0,
    "fares": 80000,
    "fareBasisCode": "loJaV16qdp",
    "originCountry": "ctdWpuaNUY"
  }
],
  "passengers": [{
    "passengerID": "PY46jn97Ti",
    "passengerType": "5VnNkPVs7k",
    "firstName": "James",
    "lastName": "Theodore",
    "title": "Mr",
    "gender": "F",
    "dateOfBirth": "20220425",
    "identityNumber": "bRcd3XuUx1",
    "nameInPNR": "UXHn1FZzTz",
    "memberTicket": "M5SnryZ27k"
  }
],
  "billing": {
    "countryCode": "Xcryl0xdSW",
    "stateProvince": "imbQzGLJqB",
    "cityName": "Ely",
    "postalCode": "2YM2F09vuB",
    "streetNumber": "751",

```

```

    "addressLine1": "4 Kingsway",
    "addressLine2": "1HaBbfS3Os"
  }
}
}

```

### 2.3.2 Response Message

| Header   |                  |              |        |          |  |
|--|------------------|--------------|--------|----------|--|
| Level  | Field Name       | Data Type    | Length | Required | Description  |
| 1  | signature        | Alphanumeric |        | M        | Response signature                                 |
| Body   |                  |              |        |          |  |
| Level  | Field Name       | Data Type    | Length | Required | Description  |
| 1  | requestID        | Alphanumeric | 50     | M        | Original Request ID                                |
| 1  | responseDateTime | Numeric      | 14     | M        | yyyyMMddHHmmss                                     |
| 1  | responseCode     | Numeric      | 3      | M        | See <a href="#">Response Code Table</a> for detail |
| 1  | responseMessage  | Alphanumeric | 250    | M        | Response message                                   |
| 1  | responseData     | JSON Object  |        | M        | Response data                                      |
| 2  | transactionID    | Alphanumeric |        | M        | GALAXY PAY transaction ID                          |
| 2  | endpoint         | Alphanumeric |        | M        | Secure page URL (Use for Redirect)                 |
| Example  |                  |              |        |          |  |
| <pre> {   "requestID": "14653fa1-2f69-4f4f-9d4b-240e1bebbdf3",   "responseDateTime": "20220506092917",   "responseCode": "00",   "responseMessage": "Success",   "responseData": {     "transactionID": "2208173PGECK2NKKBEBPPTAVSC7PNGKI",     "endpoint": "https://uat-payment.galaxypay.vn/pay/2208173PGECK2NKKBEBPPTAVSC7PNGKI"   } } </pre> |                  |              |        |          |  |

## 2.4 API Pay with Option

Use to create a payment request to GALAXY PAY with payment options. Customers can select payment methods on GALAXY PAY.

URL: <https://uat-secure.galaxypay.vn/payWithOption>

### 2.4.1 Request Message

| Header  |                           |              |        |          |  |
|---------|---------------------------|--------------|--------|----------|--|
| Level   | Field Name                | Data Type    | Length | Required | Description  |
| 1       | apiKey                    | Alphanumeric |        | M        | Request authenticate   |
| 1       | signature                 | Alphanumeric |        | M        | Request signature  |
| Body    |                           |              |        |          |  |
| Level   | Field Name                | Data Type    | Length | Required | Description  |
| 1       | requestID                 | Alphanumeric | 50     | M        | Unique ID for each transaction request<br>Recommend: <b>GUID</b> |
| 1       | requestDateTime           | Numeric      | 14     | M        | <b>yyyyMMddHHmmss</b>  |
| 1       | requestData               | JSON Object  |        |          |  |
| 2       | apiOperation              | Alpha        | 20     | M        | Set default value: <b>PAY</b>                                    |
| 2       | orderID                   | Alphanumeric | 50     | M        | Transaction ID at Merchant                                       |
| 2       | orderNumber               | Alphanumeric | 20     | O        | Order Number or Bill Number                                      |
| 2       | orderAmount               | Numeric      | 16     | M        | Transaction Amount   |
| 2       | orderCurrency             | Alpha        | 3      | M        | Send the code in <b>Currencies Table</b>                         |
| 2       | orderDateTime             | Numeric      | 14     | M        | <b>yyyyMMddHHmmss</b>  |
| 2       | orderDescription          | Alphanumeric | 250    | M        | Transaction Description  |
| 2       | language                  | Alpha        | 2      | M        | <b>vi</b> or <b>en</b><br>vi: Vietnamese<br>en: English          |
| 2       | successURL                | Alphanumeric | 500    | O        | Callback URL when Payment is success                             |
| 2       | failureURL                | Alphanumeric | 500    | O        | Callback URL when Payment is failure                             |
| 2       | cancelURL                 | Alphanumeric | 500    | O        | Callback URL when Customer cancel                                |
| 2       | ipnURL                    | Alphanumeric | 500    | O        | IPN URL  |
| 2       | <a href="#">extraData</a> | JSON Object  |        | O        | Extra data.<br>Same as API Pay                                   |
| Example |                           |              |        |          |  |

```
{
  "requestID": "14653fa1-2f69-4f4f-9d4b-240e1bebbdf3",
  "requestDateTime": 20220426083322,
  "requestData": {
    "orderID": "2a43e4b9-c5df-49e6-8b18-42af9bcd150e",
    "orderNumber": 205249008064,
    "orderAmount": 100000,
    "orderCurrency": "VND",
    "orderDateTime": 20220426083322,
    "orderDescription": "DEMO TRANSACTION",
    "otp": "on",
    "request": "purchase",
    "language": "vi",
    "extraData": {
    }
  }
}
```

## 2.4.2 Response Message

| Header  |                  |              |        |          |  |
|---|------------------|--------------|--------|----------|--|
| Level   | Field Name       | Data Type    | Length | Required | Description  |
| 1   | signature        | Alphanumeric |        | M        | Response signature                                 |
| Body  |                  |              |        |          |  |
| Level   | Field Name       | Data Type    | Length | Required | Description  |
| 1   | requestID        | Alphanumeric | 50     | M        | Original Request ID                                |
| 1   | responseDateTime | Numeric      | 14     | M        | yyyyMMddHHmmss                                     |
| 1   | responseCode     | Numeric      | 3      | M        | See <a href="#">Response Code Table</a> for detail |
| 1   | responseMessage  | Alphanumeric | 250    | M        | Response message                                   |
| 1   | responseData     | JSON Object  |        | M        | Response data                                      |
| 2   | transactionID    | Alphanumeric |        | M        | GALAXY PAY transaction ID                          |
| 2   | endpoint         | Alphanumeric |        | M        | Secure page URL (Use for Redirect)                 |
| Example   |                  |              |        |          |  |
| <pre>{   "requestID": "260b8362e5194b0da4b7eb6c54c87225",   "responseDateTime": "20220912174055",   "responseCode": "200",   "responseMessage": "Success",   "responseData": {     "transactionID": "220912M2LVCFCSCQNE3FHVOJP7OTS5D4",     "endpoint": "https://uat-payment.galaxypay.vn/payWithOption/220912M2LVCFCSCQNE3FHVOJP7OTS5D4"   } }</pre> |                  |              |        |          |  |

## 2.5 Cancel Callback

- Use for Merchant to redirect customer to cancel payment page.
- Support http method **POST** or **GET**

### 2.5.1 Response Message

| Body   |                     |              |        |          |   |
|--|---------------------|--------------|--------|----------|---|
| Level  | Field Name          | Data Type    | Length | Required | Description                               |
| 1  | data                | Alphanumeric |        | M        | Base-64 string                            |
| 1  | signature           | Alphanumeric |        | M        | Response Signature                        |
| Data (Decode Base-64 String)   |                     |              |        |          |   |
| Level  | Field Name          | Data Type    | Length | Required | Description                               |
| 1  | requestID           | Alphanumeric | 50     | M        | Original Request ID                       |
| 1  | responseDateTime    | Numeric      | 14     | M        | yyyyMMddHHmmss                            |
| 1  | responseCode        | Numeric      | 3      | M        | See <b>Response Code Table</b> for detail |
| 1  | responseMessage     | Alphanumeric | 250    | M        | Response message                          |
| 1  | responseData        | JSON Object  |        | M        | Response data                             |
| 2  | transactionID       | Alphanumeric | 38     | M        | Transaction ID at GALAXY PAY              |
| 2  | transactionDateTime | Numeric      | 14     | M        | yyyyMMddHHmmss                            |
| 2  | orderID             | Alphanumeric | 50     | M        | Transaction ID at Merchant                |
| 2  | orderNumber         | Alphanumeric | 20     | O        | Order Number or Bill Number               |
| 2  | orderAmount         | Numeric      | 16     | M        | Transaction Amount                        |
| 2  | orderCurrency       | Alpha        | 3      | M        | VND or USD                                |
| 2  | orderDateTime       | Numeric      | 14     | M        | yyyyMMddHHmmss                            |
| 2  | orderDescription    | Alphanumeric | 250    | M        | Transaction Description                   |
| 2  | language            | Alpha        | 2      | M        | vi or en<br>vi: Vietnamese<br>en: English |
| Example  |                     |              |        |          |   |
| <pre>{   "data":   "eyJyZXF1ZXN0SUQ0I0I0NDY1M2ZhMS0yZjY5LTRmNGYtOWQ0Yi0yNDBlMWJlYmJkZjMiLCJyZXNwb25zZURhdGVUaW1lIjoimjAyMjA1MDYxMTM1MTciLCJyZXNwb25zZUNvZGU0I0I0OTkiLCJyZXNwb25zZU1lc3NhZ2UiOiJDYW5jZWxlZCBieSB1c2VyIiwicmVzcG9uc2VEYXRhIjpw7InRyYW5zYWN0aW9uSUQ0I0I0YmJlMjY5OWU2NWQ5YTcxZDU0OGU2YjY3MzIzYWVmMWE0OTRhYyIsInRyYW5zYWN0aW9uRGF0ZVRpbWUiOiIyMDIyMDUwNjExMzUxNyIsIm9yZGVySUQ0I0I0ODgyODkiLCJvcmlk51bWJlcjI6IjgyMjYyODg5Iiw</pre> |                     |              |        |          |   |

```
ib3JkZXJBbW91bnQiOiIxMDkwMDAiLCJvcmlkRlcn2NyaXB0aW9uIjoU2VjdXJlIFBhZ2UgRGVtbyIsIm9yZGVyQ3VycmVuY3ki
OiJWTKQiLCJvcmlkRhdGVUaW11IjoUjA0MDUyMDIwMDAiLCJsYW5ndWFnZSI6InZpIn19",
  "signature": "be8d2d815d694037d7ec2d9f7ac645d7a6168b692af6b786c1d59da72cd93a5e"
}
```

Decode Base-64 string

```
{
  "requestID": "14653fa1-2f69-4f4f-9d4b-240e1bebbdf3",
  "responseDateTime": "20220506113517",
  "responseCode": "499",
  "responseMessage": "Canceled by user",
  "responseData": {
    "transactionID": "22050699e65d9a71d548e6b67323aef1a494ac",
    "transactionDateTime": "20220506113517",
    "orderID": "888289",
    "orderNumber": "82262889",
    "orderAmount": "109000",
    "orderDescription": "Secure Page Demo",
    "orderCurrency": "VND",
    "orderDateTime": "20220405202000",
    "language": "vi"
  }
}
```

## 2.6 Result & IPN Callback

- Result URL: Use for Merchant to show result for Customer. Support http method **POST** or **GET**
- IPN URL: Use for Merchant to receive payment result and process business workflow.

### 2.6.1 Request Message

| Body   |                     |              |        |          |   |
|--|---------------------|--------------|--------|----------|---|
| Level  | Field Name          | Data Type    | Length | Required | Description                               |
| 1  | data                | Alphanumeric |        | M        | Base-64 string                            |
| 1  | signature           | Alphanumeric |        | M        | Response Signature                        |
| Data (Decode Base-64 String)   |                     |              |        |          |   |
| Level  | Field Name          | Data Type    | Length | Required | Description                               |
| 1  | requestID           | Alphanumeric | 50     | M        | Original Request ID                       |
| 1  | responseDateTime    | Numeric      | 14     | M        | yyyyMMddHHmmss                            |
| 1  | responseCode        | Numeric      | 3      | M        | See <b>Response Code Table</b> for detail |
| 1  | responseMessage     | Alphanumeric | 250    | M        | Response message                          |
| 1  | responseData        | JSON Object  |        | M        | Response data                             |
| 2  | transactionID       | Alphanumeric | 38     | M        | Transaction ID at GALAXY PAY              |
| 2  | transactionDateTime | Numeric      | 14     | M        | yyyyMMddHHmmss                            |
| 2  | orderID             | Alphanumeric | 50     | M        | Transaction ID at Merchant                |
| 2  | orderNumber         | Alphanumeric | 20     | O        | Order Number or Bill Number               |
| 2  | orderAmount         | Numeric      | 16     | M        | Transaction Amount                        |
| 2  | orderCurrency       | Alpha        | 3      | M        | VND or USD                                |
| 2  | orderDateTime       | Numeric      | 14     | M        | yyyyMMddHHmmss                            |
| 2  | orderDescription    | Alphanumeric | 250    | M        | Transaction Description                   |
| 2  | language            | Alpha        | 2      | M        | vi or en<br>vi: Vietnamese<br>en: English |
| Example  |                     |              |        |          |   |
| <pre>{   "data":   "eyJyZXF1ZXN0SUQ0IjIyNDY1M2ZhMS0yZjY5LTRmNGYtOWQ0Yi0yNDBlMWJlYmJkZjMiLCJyZXNwb25zZURhdGVUaW11IjoimjAyMjA1MDYxMTM1MTciLCJyZXNwb25zZUNvZGU0IiYMDAiLCJyZXNwb25zZU1lc3NhZ2UiOiJUcmFuc2FjdGlvbiBpcyBzdWNjZXRnZnVsLiIsInJlc3Bvb3N1RGF0YSI6eyJ0cmFuc2FjdGlvbk1EiJoimjIwNTA2OT11NjVke3MwQ1NDhlNmI2NzMyM2FlZjFhNDk0YWMiLCJ0cmFuc2FjdGlvbkRhZGVUaW11IjoimjAyMjA0MDUyMDIwMDAiLCJvcmlkclEiOiODg4Mjg5Iiwib3JkZXJ0dW11ZXIiOiI</pre> |                     |              |        |          |   |

```
4MjI2Mjg4OSIsIm9yZGVyQW1vdW50IjoimTA5MDAwIiwib3JkZXJEZXRjcmlwdGlvbiI6IiNlY3VyZSBQYWdlIERlbW8iLCJvcmlkNlcnJlbnN5Ijoivk5EIiwib3JkZXJEYXRlVGltZSI6IjIwMjIwMDAwIiwibGFuZ3VhZ2UiOiJ2aSJ9fQ==",
  "signature": "4952cb18e6b136de4c15ecbae75bala758257684eb97a43f351e34bb12cede5f"
}
```

Decode Base-64 string

```
{
  "requestID": "14653fa1-2f69-4f4f-9d4b-240e1bebbdf3",
  "responseDateTime": "20220506113517",
  "responseCode": "200",
  "responseMessage": "Transaction is successful.",
  "responseData": {
    "transactionID": "22050699e65d9a71d548e6b67323aef1a494ac",
    "transactionDateTime": "20220405202000",
    "orderID": "888289",
    "orderNumber": "82262889",
    "orderAmount": "109000",
    "orderDescription": "Secure Page Demo",
    "orderCurrency": "VND",
    "orderDateTime": "20220405202000",
    "language": "vi"
  }
}
```

## 2.6.2 Response Message (FOR IPN ONLY)

| Body  |                |              |        |          |   |
|-------|----------------|--------------|--------|----------|---|
| Level | Field Name     | Data Type    | Length | Required | Description   |
| 1     | ipnStatus      | Alphanumeric | 50     | M        | Response Code for IPN Request.<br><br>Accepted value:<br><b>200</b> : Transaction Success<br>404: Transaction Not Found<br>409: Transaction Completed |
| 1     | ipnDescription | Alphanumeric | 250    | O        | Response Description  |