PAYMENT PROCESSING USING GOOGLE PAY™ THROUGH INTEGRATION WITH UKRCARDPAY PSP
## CHANGE LOG

<table>
<thead>
<tr>
<th>VERSION</th>
<th>DATE</th>
<th>EXECUTOR</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0.0</td>
<td>03.07.2023</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Contents

1. FAMILIARIZATION WITH GOOGLE PAY™ DOCUMENTATION .................................................. 5

2. INTEGRATION WITH GOOGLE PAY™ API FOR WEBSITE/APPLICATION ....................... 5

  2.1 PAYMENT OPERATION WITH GOOGLE PAY™ ................................................................. 6

  2.2 ACTIVATION OF GOOGLE PAY™ PAYMENT METHOD FOR MERCHANT AND CARDHOLDER REGISTERED IN THE PAYMENT GATEWAY OF TOV "UKRCARD" – UKRCARDPAY ............................................................... 7

  ▪ IF THE MERCHANT’S ONLINE STORE IS ALREADY INTEGRATED WITH THE PAYMENT GATEWAY (UKRCARDPAY), PLEASE CONTACT OUR MANAGER OR SEND A REQUEST TO THE EMAIL HOTLINE@UKRCARD.UA. 7

  ▪ IF THE MERCHANT’S ONLINE STORE IS NOT YET INTEGRATED WITH THE PAYMENT GATEWAY (UKRCARDPAY), PLEASE CONTACT OUR MANAGER OR SEND A REQUEST TO THE EMAIL HOTLINE@UKRCARD.UA. 7

  2.3 EXAMPLES OF PARAMETERS RETURNED BY GOOGLE PAY™ ........................................ 7

  2.4 PROCESSING DATA RECEIVED FROM GOOGLE PAY IN THE "TOKEN" PARAMETER ....................... 9

  2.5 CHECKING COMPLIANCE WITH THE INTEGRATION CHECKLIST FOR GOOGLE PAY ...................... 9

  2.6 ACCESS TO THE PRODUCTION VERSION FROM GOOGLE SPECIALISTS ...................................... 9
GENERAL INFORMATION

Google Pay™ is a simple and fast way to make purchases in stores and online. With Google Pay™, you can accept payments using VISA and MasterCard cards.

Paying with Google Pay™ is secure, and your banking card information is safely protected. All payment information is encrypted and stored on secure servers. The card number is not transmitted, but instead, a virtual account number is used. In case of a lost phone, it can be easily remotely blocked, and the data can be erased.

TERMS AND DEFINITIONS

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPS (International Payment Systems)</td>
<td>International payment systems such as VISA and/or Mastercard.</td>
</tr>
<tr>
<td>Issuing Bank</td>
<td>A bank that is a member of the MPS (Visa and/or MasterCard) and issues payment cards to customers. It ensures the debiting of funds from the customer’s card for payment transactions with merchants.</td>
</tr>
<tr>
<td>Acquiring Bank</td>
<td>A bank that is a member of the MPS (Visa and/or MasterCard) and establishes contractual relationships to provide services to merchants for accepting payment cards from MPS (Visa/MasterCard) for the payment of goods/services.</td>
</tr>
<tr>
<td>Customer/Cardholder</td>
<td>An individual or legal entity that makes payments for goods/services using payment cards from MPS on the merchant’s website.</td>
</tr>
<tr>
<td>Merchant</td>
<td>An organization that has an agreement with an Acquiring Bank to accept payment for goods/services through payment cards online. It provides the customer/cardholder with an interface for online payment services by entering card information, acting as a client of the Payment Gateway with which it has a service agreement.</td>
</tr>
<tr>
<td>Payment Gateway</td>
<td>The combination of software and hardware that performs: 1) registration and processing of merchant requests for transaction processing, 2) conducting transactions, 3) transmission of transaction results.</td>
</tr>
<tr>
<td>PSP</td>
<td>Payment Service Provider. A Payment Service Provider is a company or entity that offers payment processing services to merchants, enabling them to accept and process payments from customers.</td>
</tr>
<tr>
<td>Order</td>
<td>The payment transaction made by the customer/cardholder using payment cards from MPS for a specified number of selected goods and services on the merchant’s website.</td>
</tr>
</tbody>
</table>
1. Familiarization with Google Pay™ documentation

Before configuring the Google Pay™ API, please acquaint yourself with the documentation. To familiarize yourself with the documentation of the Google Pay™ service before setting up the Google Pay™ API, please review the following resources:

- **Developer Documentation for Websites**: This documentation provides rules and conditions for using the Google Pay™ API on websites. It includes guidelines for integration, user experience, and brand usage. Make sure to read and understand the terms and conditions outlined in this documentation.

- **Developer Documentation for Mobile Applications**: This documentation is specifically tailored for developers working on mobile applications. It includes rules for using the Google Pay™ API, guidelines for brand usage, user instructions, and an integration checklist. Familiarize yourself with this documentation to ensure a smooth integration process.

- **List of Prohibited Goods and Services**: Google Pay™ has specific guidelines regarding prohibited goods and services that cannot be processed through the platform. Refer to this list to ensure compliance with the policies and to avoid any issues with your integration.

By reviewing these documentation resources, you will have a comprehensive understanding of the rules, conditions, integration requirements, and prohibited items associated with the Google Pay™ service. This will enable you to set up the Google Pay™ API correctly and ensure a compliant and successful integration.

2. Integration with Google Pay™ API for Website/Application

To integrate your website/application with the Google Pay API and obtain PaymentData, the following parameters and requirements should be considered:

- **HTTPS-enabled webpage**: To ensure secure data transmission, your website/application should support the HTTPS protocol. This means that your webpage should be accessible via the secure HTTPS protocol (e.g., https://www.example.com) instead of the non-secure HTTP protocol.

- **Valid TLS certificate**: Your webpage should have a valid TLS certificate that confirms your domain. This certificate ensures the encryption of transmitted data and guarantees that payment-related information is transmitted securely.

- **Parameter values**:
  
  ```
  allowPaymentMethods : CARD
tokenizationSpecification = { "type": "PAYMENT_GATEWAY"}
allowedCardNetworks = ['MASTERCARD', 'VISA'];
allowedCardAuthMethods = ['PAN_ONLY', 'CRYPTOGRAM_3DS'];
gateway = ukrcardpay
gatewayMerchantId – The unique identifier of the online store, which is provided to each partner when connecting to UKRCARD payment gateway - ukrcardpay.
  ```

When integrating with the Google Pay™ API, you will need specific parameter values that should be properly configured in your website/application. These parameters include the Merchant ID, private key, public key, and other required values for interacting with the API.
During development and integration with the Google Pay™ API, follow the developer documentation for detailed instructions and code examples. Refer to the official Google Pay™ API documentation for detailed information on requirements, parameter configuration, and integration setup.

Successful integration with the Google Pay™ API will allow your customers to use Google Pay™ for quick and convenient payments on your website or application, enhancing user satisfaction and improving the checkout process.

3DS verification is available by default for PAN_ONLY transactions.
If the integration is done correctly, your website/application will display a payment button. When the button is clicked, a pop-up window or a selection form associated with the Google Pay™ linked account will appear on the device with Google Pay™ enabled.

Example parameter values returned by Google Pay™ are provided in section 2.3 of this document.

2.1 Payment Operation with Google Pay™
To enable the Merchant to accept payments using Google Pay™, the following steps are required:

- Sign a contract offer with LLC «UKRCARD» (email: project@ukrcard.ua) to connect to the internet acquiring service.
- Select the option to integrate with Google Pay™.
- Familiarize yourself with and consistently adhere to the Merchant’s Acceptable Use Policy for Google Pay APIs.
- Review and sign the Terms of Service defined in the Google Pay API.
- To interact with the Google Pay™ service, use the following parameters:
  - gateway: This parameter is set during the integration of LLC «UKRCARD» with Google Pay™ and has the value “ukrcardpay.”
  - gatewayMerchantID: This parameter is set by LLC «UKRCARD» upon Merchant registration.

To make payments with Google Pay™, follow these steps:

- Accept the Google Pay Terms of Service at https://payments.developers.google.com/terms/sellertos.
- Obtain confirmation from LLC «UKRCARD» that the settings to support Google Pay™ for the specified MerchantID have been completed.

If you are independently integrating the Google Pay API into a mobile application or an internet store's browser, follow these steps:

- Follow the procedures outlined in the Google Pay Web developer documentation and the Google Pay Web integration checklist.
- Obtain the Gateway Merchant ID parameter through the Business Console and provide it to LLC «UKRCARD» for registration in the information systems.
- If integrating with Google Pay™ and displaying only the logos of accepted payment systems on the internet store's side, you must add the Google Pay™ logo in accordance with the Google Pay Web Brand Guidelines.
- Obtain confirmation from LLC «UKRCARD» that the settings to support Google Pay™ for the specified MerchantID have been completed.
2.2 Activation of Google Pay™ Payment Method for Merchant and Cardholder registered in the PAYMENT GATEWAY of TOV "UKRCARD" – ukrcardpay

The activation of the Google Pay™ payment method for the Merchant and Cardholder registered in the PAYMENT GATEWAY of LLC "UKRCARD" - ukrcardpay can be done as follows:

- If the Merchant's online store is already integrated with the PAYMENT GATEWAY (ukrcardpay), please contact our manager or send a request to the email hotline@ukrcard.ua.

- If the Merchant's online store is not yet integrated with the PAYMENT GATEWAY (ukrcardpay), please contact our manager or send a request to the email hotline@ukrcard.ua.

Please note that the specific steps and requirements for activating the Google Pay™ payment method may vary depending on the integration process with LLC "UKRCARD." It is recommended to consult with the LLC "UKRCARD" team or refer to their documentation for detailed instructions and guidance on the activation process.

2.3 Examples of parameters returned by Google Pay™

2.3.1. MASTERCARD:

```json
{
  "apiVersionMinor": 0,
  "apiVersion": 2,
  "paymentMethodData": {
    "description": "Mastercard ••• 4444",
    "tokenizationData": {
      "type": "PAYMENT_GATEWAY",
      "token": "\"\"["signature":\"\"MEUCIQD6WCMFaj4urkBm99hHTTa60P+Hbow7jQPjST0CX9vAGwltTaj1dG
      eKfFxaG1euDrIyIw45g8McRH4TOZK+9Gk\"\"u003d\"\" intermediateSigningKey\"\"v1\"\"keyValue\"\"MFKwEwYHkoZtj0JCAQYlKoZtj0DAQcDQgAEB4w8f6f6gNgC+3
      V55mKFOVOQZntjdcbDpmpz8RLGfm7FUv7\"\"R1CZjTfDteDAHIovyP7TvGis+msPjDnxdQ\"\"u003d\"\"keyExpiration\"\"1678939090310\"\",
      "signatures": ["MEYC
      CIQDoSB0a6qOE4A6hXsdwADN+N+J3SNXjqbrswUNI/W4u6ghA9PUSZY2bZBDFf/IMhrz0+4
      DiLPG10IeNyNjprp+dv\"\}],
    "protocolVersion": \"ECv2\",
    "signatureMessage": ["\"\"encyrptedMessage\"\"soxVNmLyHNlR/XbTU360022f40fbAjl1j+GbJzpc/J5hOrdcYmUKSzMzvAcy
      ZS1T+4Pwlj7dAdJQ0s6SmUkJ17G+b5RjztvF58oZRNnfGCfS3W7KdX5ILYJk23J7QcReRph
      Ept6Uu0rTiZaUqVwOe+EjTvLFcpW0lAh1fuouvOMwW9x0FOSfFrXZL1Zq4GjWAnGIQK/0QoS
      wexj2DKTYUgP4Lq62bZcmBwnw0UjTe00DtvqALWuUKUtKyxomYBRwZHUVZARLY020MrDSt
      EfCh SYOSQ/CUBIAfBYZ2BCdfNsTvgwAANFN/iiB8Nrb6iQUNRrfc1/Tmc+a7xu6okaehTJlgA
      nWbMWf+rt+tq+RNRW5XL7E914to6ez2gOeATrn/Rqh/QbIMBPk1palRWJe49fFEvZ6f4my2131M0
      Q4P+iijjN5saHb5BkEeuCvdrP4lY4lwvVpe6FeQucTEDwHxLbJULMun8Qpg36McK1q3zBb
      Qx9jatAVyQgEnyBbBvULtFsAL+xVLGJNPqNATF2/P4Pu29+uDBC3YAfDUAKEb8AO6r6H
      \",\",\"ephemeralPublicKey\":\"BCSVmfnKHFlXzdnY6QYQFSW5VOTNeWwsLpW7MjSFV
      JFvDC8RyABYtvxFawwXhDywjrZ2sG57dM60OpyAmEP5E5\",\"u003d\"\",\"tag\":\"\"YjW
      F6r2H1q8FbrL0xuZuVRAG328LZ0gJlAg5Xg4\"\"u003d\"\"
      \"
      
      CONDUCTING PAYMENTS USING GOOGLE PAY THROUGH INTEGRATION WITH UKRCARDPAY PSP. LLC "UKRCARD" 2023.
      SUPPORT SERVICE: hotline@ukrcard.ua.
      
      7
      
```
2.3.2. VISA

{  
  "apiVersionMinor": 0,  
  "apiVersion": 2,  
  "paymentMethodData": {  
    "description": "Visa •••• 1111",  
    "tokenizationData": {  
      "type": "PAYMENT_GATEWAY",  
      "token":  
        "signature": "MEYCIQCUDRRMy9+nmg0x0kQT39s6o/TmxExCzQWITAZrK42nwlhAPjtEUuMuDl5nTDE62+Tn0PgdEcvltvNcm+cYnNaxq5",  
        "intermediateSigningKey": "MEYCIQCUDRRMy9+nmg0x0kQT39s6o/TmxExCzQWITAZrK42nwlhAPjtEUuMuDl5nTDE62+Tn0PgdEcvltvNcm+cYnNaxq5",  
        "protocolVersion": "ECv2",  
        "signedMessage": "gjLAnqmWjLcZAIwh6cPzEM1Q0KdkwaqkWdXKzUXUtqAhJ6JCI+OXQK317Bv72nO8MLFh10PawgCaq1XGa7qc5C4kKZCrR+iBGwA24Vujl2Du4Y7wysuATyPgrAlK2PNt5VoK+RkTvvgcyK0Udwb2f9biN0cXv9Gceq/OjNKGFz5K8YCyv+AWdJGjr5L/yk/86B6Bz89yUuQz/XKNJHtmTrPNcRiUvB8tX0Kdqi23fDRIg99aCA2TnLzgwBsp+X8YrefsoD+X0aArlae3ocZYMPeYn7MvMvMhc+RCOT7z4uY8E8DQsp5hPZHauubJdUbyNek99H4bTr4mLEYu7wuwr9Om8L4x/BhU6ipo7rnCaulpohqfEstXl6VTDDf4aq0q3oRxi0NWsxXNCUMVdSdpj5FIwjbk/eC9FmM1t1VcnD2KZM58M+y/Nr6yDArOPY8fSyXk/IQvXmjA/R7Kp8+Gt8bgtUp2PEQIA1/Bgl7gMXoboA1HlMIe50581Ua0n6wMzLGMcrQfig+MlfwcSod65oyFNt2zUZB0PrMoPZPCGzh0O7WaPaeyjHEMU/\u0003d\",  
        "ephemeralPublicKey": "6E0vE3U9aDR/cfV5U9v+08aQFm/301jUf6Kg55STz+XznqPm+X9euz79UcCf/7Xv26dV99h/i57V6yZV8Em1eK+j4PZwS6vX/003d",  
        "tag": "gc5INmY7Z3J3ZG+i9B06HeeOn3tez826JQp6R0DUze0/\u0003d\"  
    }  
  }  
}  

"type": "CARD",  
"info": {  
    "cardNetwork": "VISA",  
    "cardDetails": "1111"  
}  
}  
}
2.4 Processing data received from Google Pay in the "token" parameter

Processing data received from Google Pay in the "token" parameter can be done in two ways:

- Decryption on the side of the Merchant's online store. The data received in the "token" parameter should be decrypted (using the information on how to generate the public key for the request to Google, decryption of the payment token, and step-by-step instructions for verification and decryption of the token, and then sent to the PAYMENT GATEWAY of LLC "UKRCARD" - ukrcardpay.
- Decryption on the side of LLC "UKRCARD". The data received in the "token" parameter should be sent to the PAYMENT GATEWAY of TOV "UKRCARD" - ukrcardpay.

2.5 Checking compliance with the integration checklist for Google Pay

Checking compliance with the integration checklist for Google Pay™ is done by:

- Reviewing the integration checklist and verifying that all steps of the website payment page integration have been completed.
- Reviewing the integration checklist and verifying that all steps of the Android application integration have been completed.

2.6 Access to the production version from Google specialists

Access to the production version from Google specialists can be obtained by requesting:

- Access to the production version for the website payment page.
- Access to the production version for the Android application.