

# TEMCO

Blockchain based supply chain &  
E-commerce system platform

# TEMCO TEAM.

TEMCO team started with the co-founders' dream of commercialization of the blockchain.  
Currently there are total of 30 employees with 2 headquarters and 5 departments.

# WHAT WE DO.

Taking true value of supply chain data to the next level  
with E-commerce and Supply Chain Ecosystem

## **Supply Chain Management**

Blockchain based SCM and  
proof of authenticity

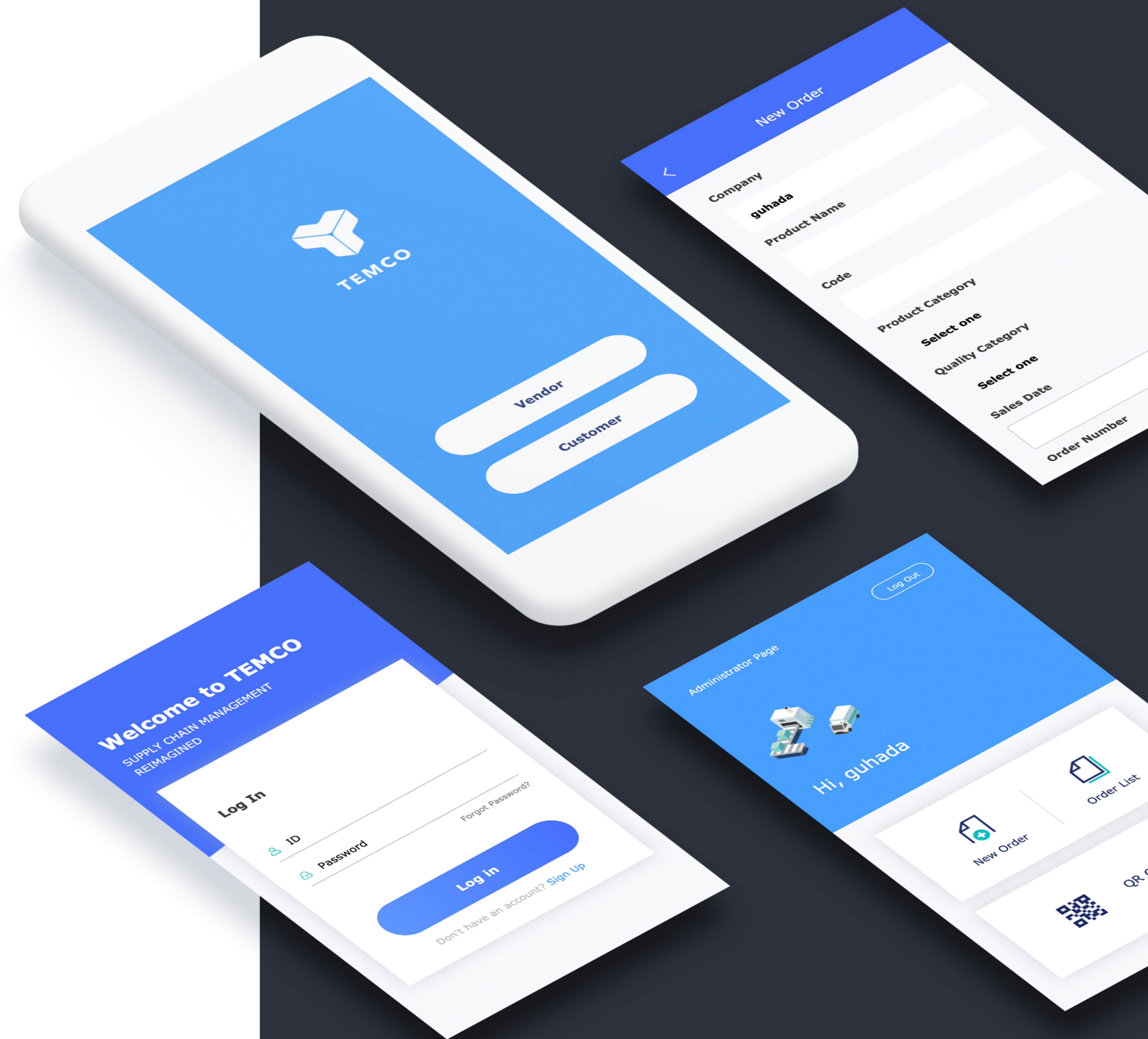
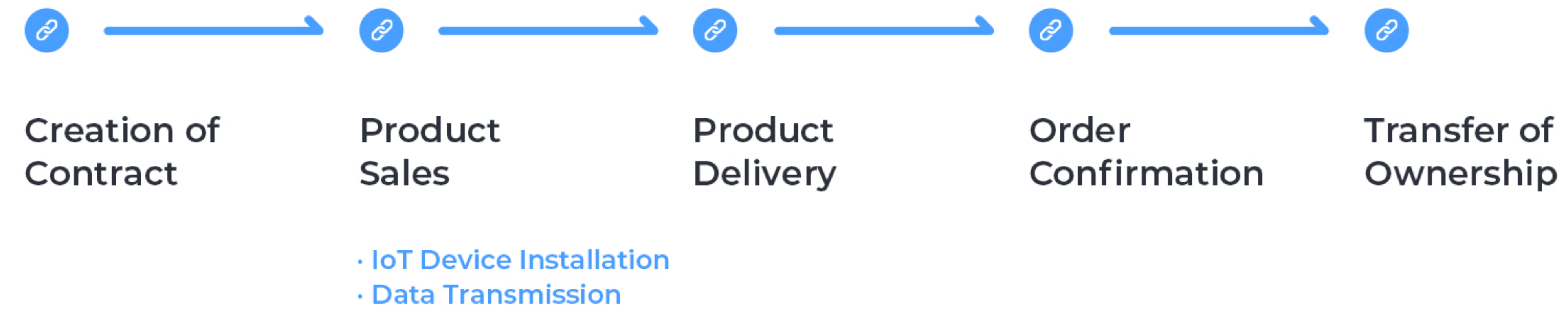
## **E-commerce**

Blockchain based e-commerce  
platform for B2C mass adoption

## **Open Blockchain API**

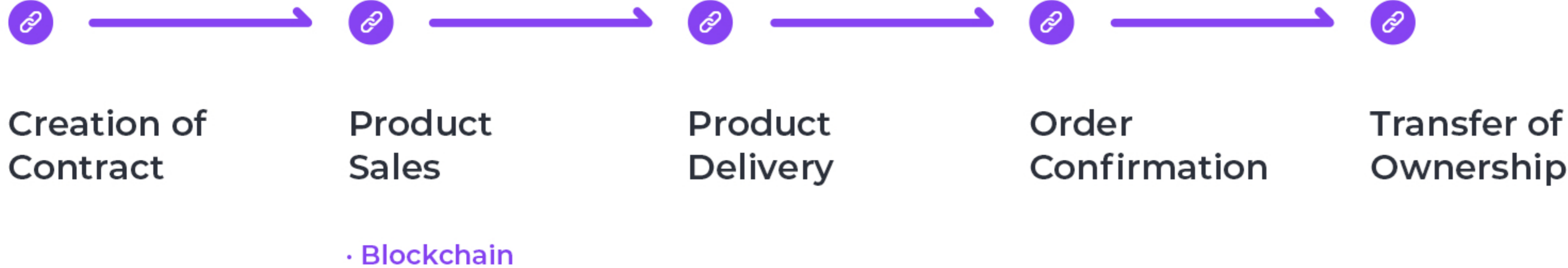
Blockchain based API  
integrated solution for B2B

# Supply Chain Blockchain



# GUHADA

TEMCO's major launch is an e-commerce platform called 'GUHADA' which is used to track the reselling of luxury goods and verify authenticity using blockchain.



# KEY FEATURES IN GUHADA

GUHADA is a new and revolutionary e-commerce open market platform system that applies supply chain blockchain technology and active rewards system from the entire process of authenticity verification to user community.



## Vendor Verification System

- TEMCO verifies vendors with business registrations and documents
- Uploading data to blockchain



## Transparent Product Record Management

- Recording of sales, delivery, transfer of ownership, etc.
- Uploading data to blockchain



## Authentic Product Registration System

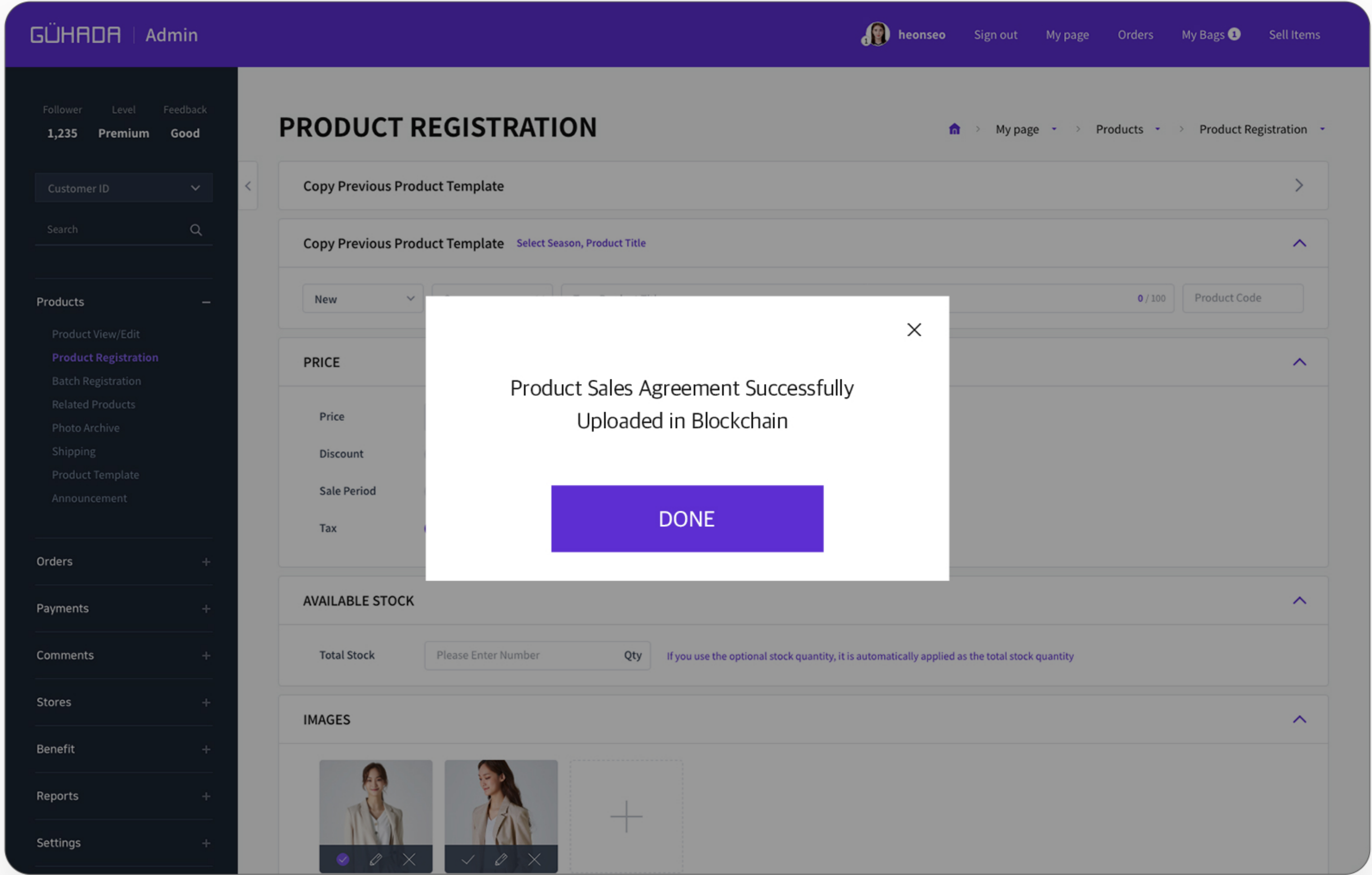
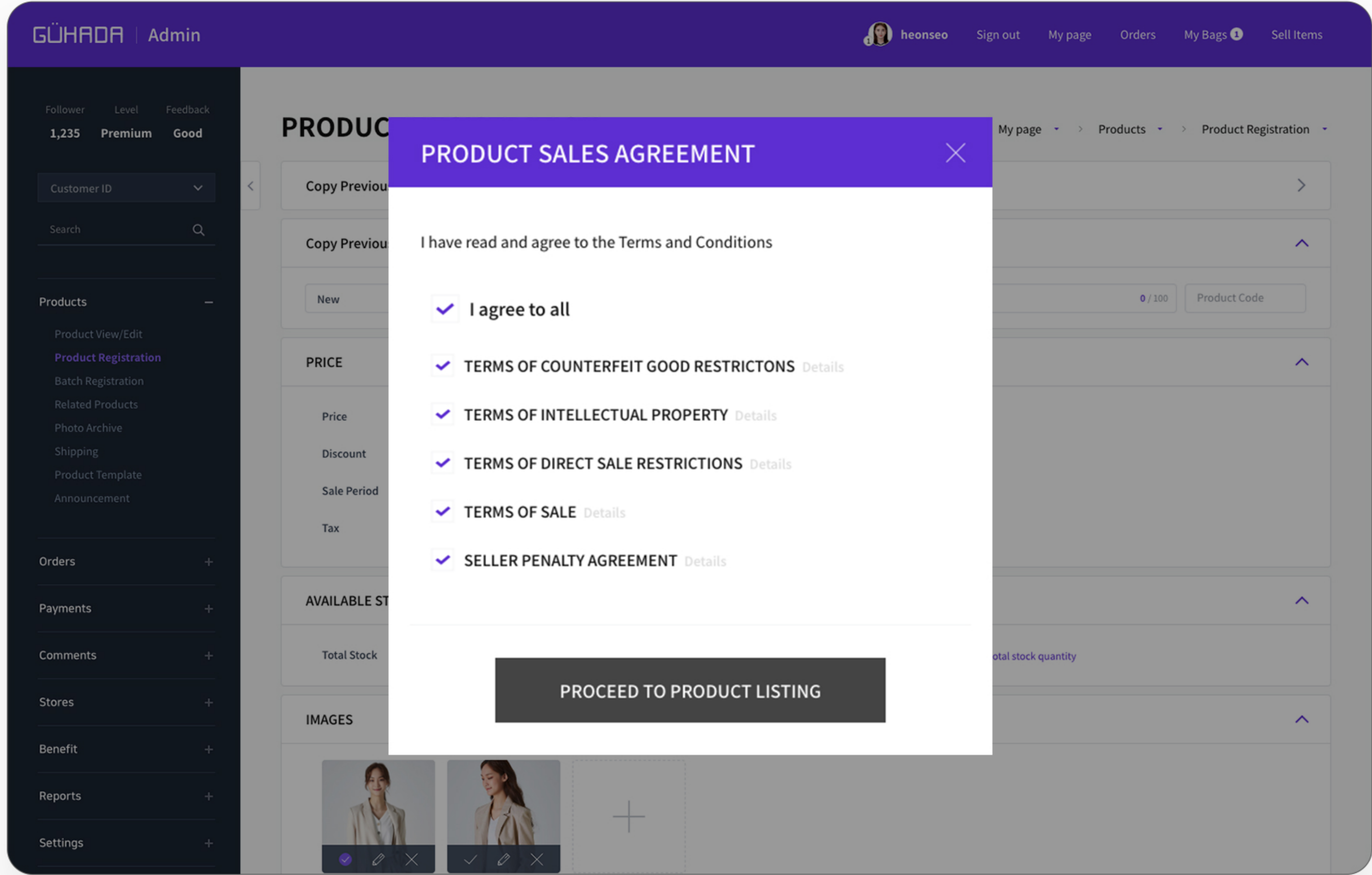
- Smart Contract based
- counterfeit compensation
- Sale of NFC attached Products



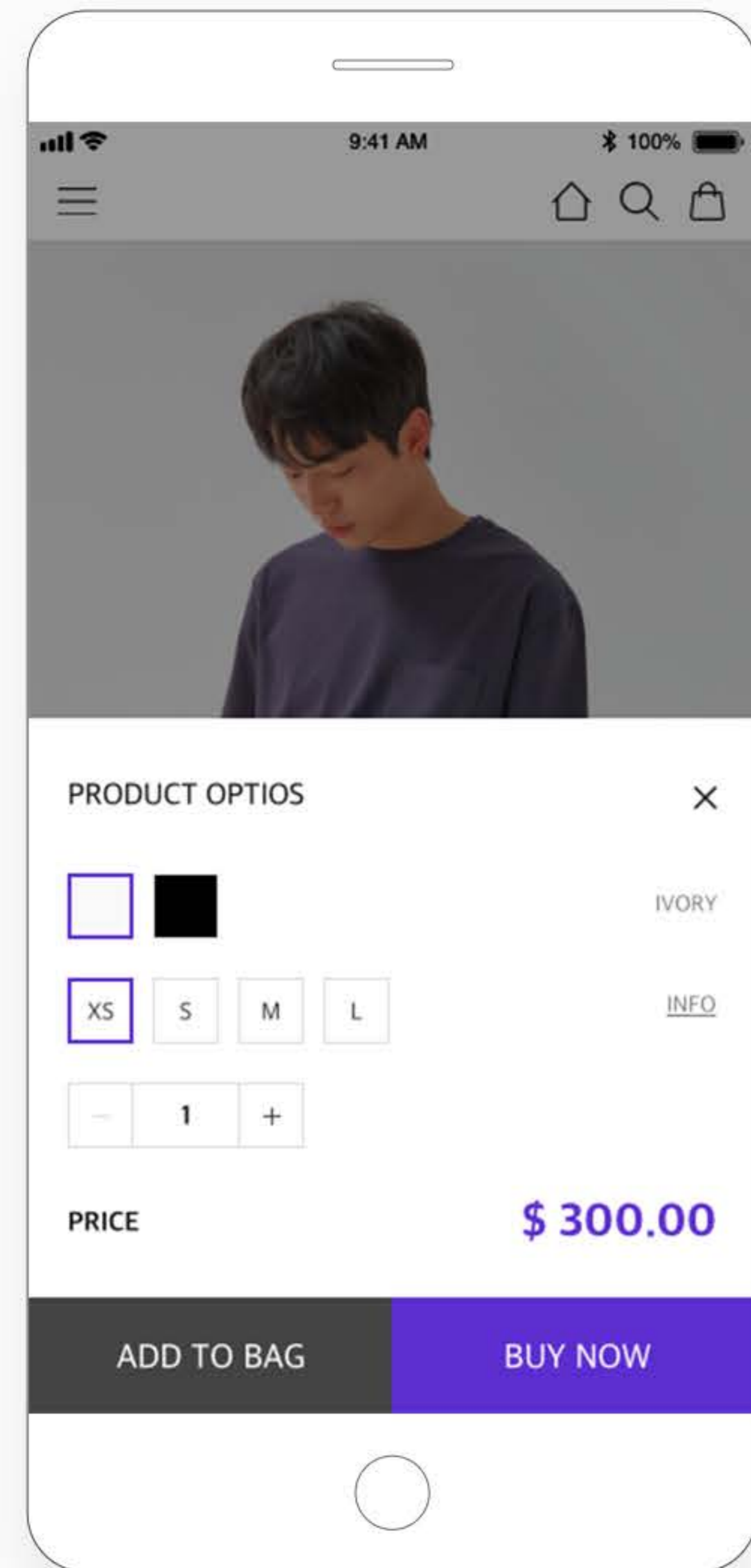
## Token Economy

- Luxury Goods Community
- Token Payment System

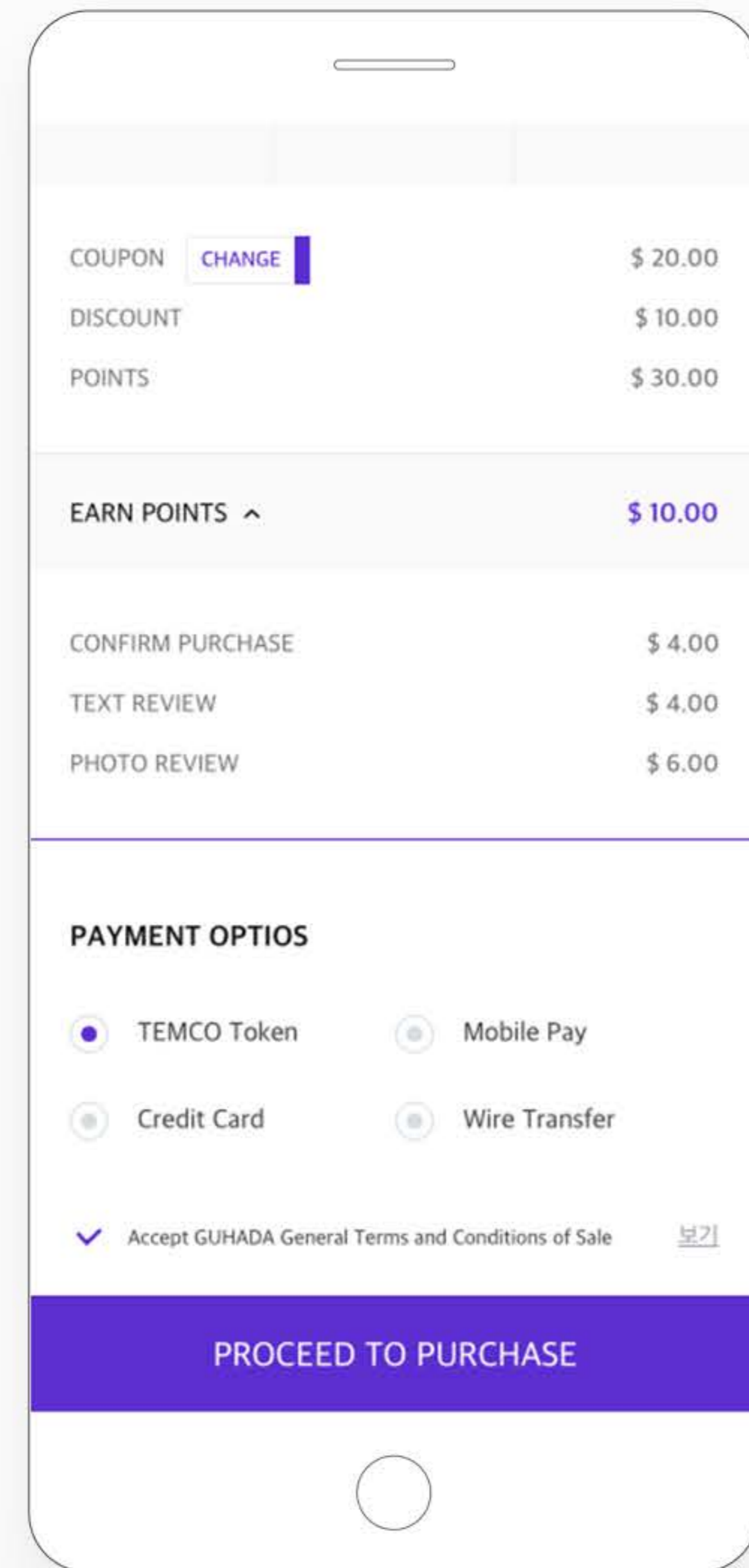
# COMPENSATION CONTRACT WITH SELLERS THROUGH SMART CONTRACT



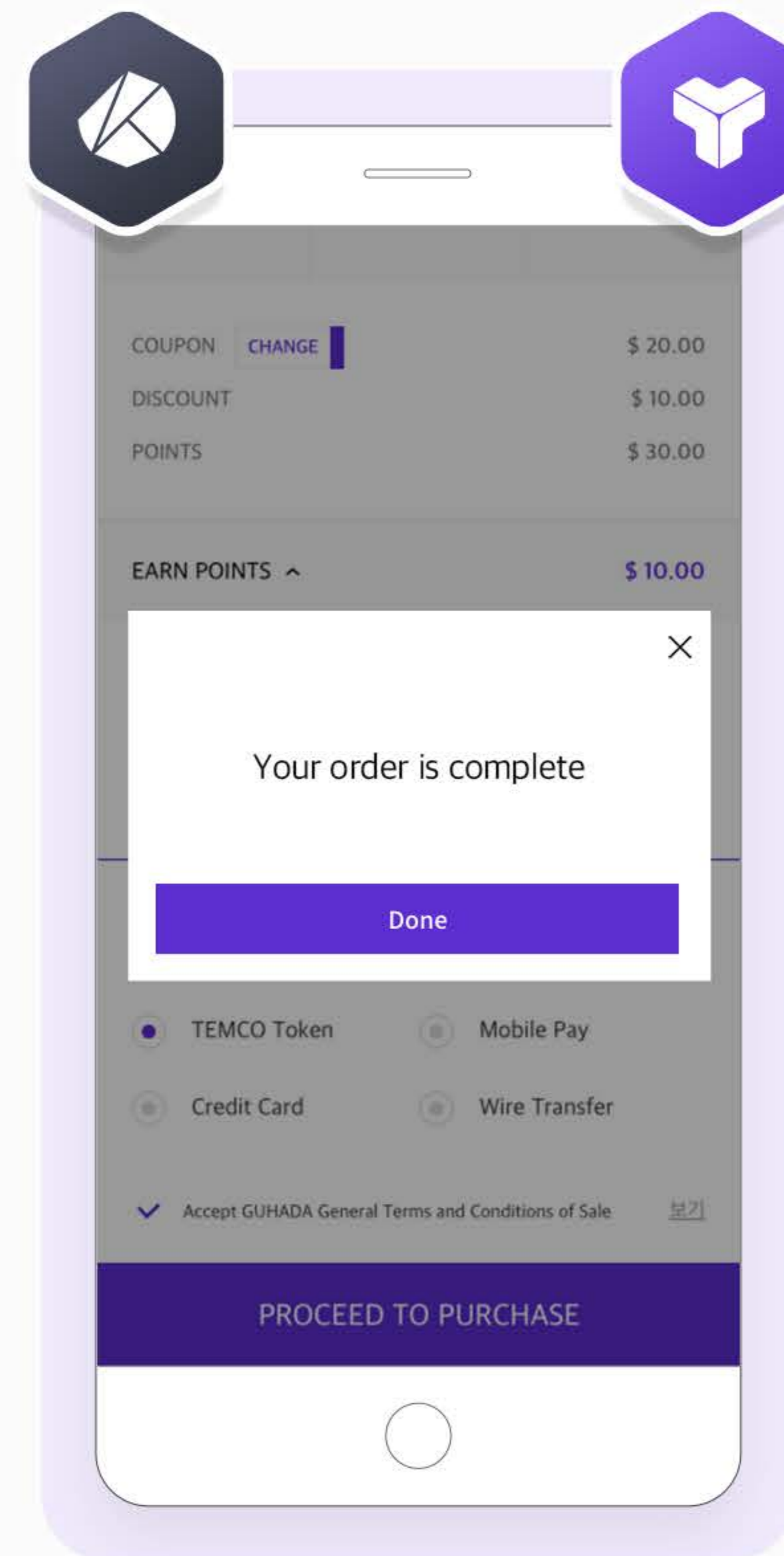
# Supply Chain Authentication



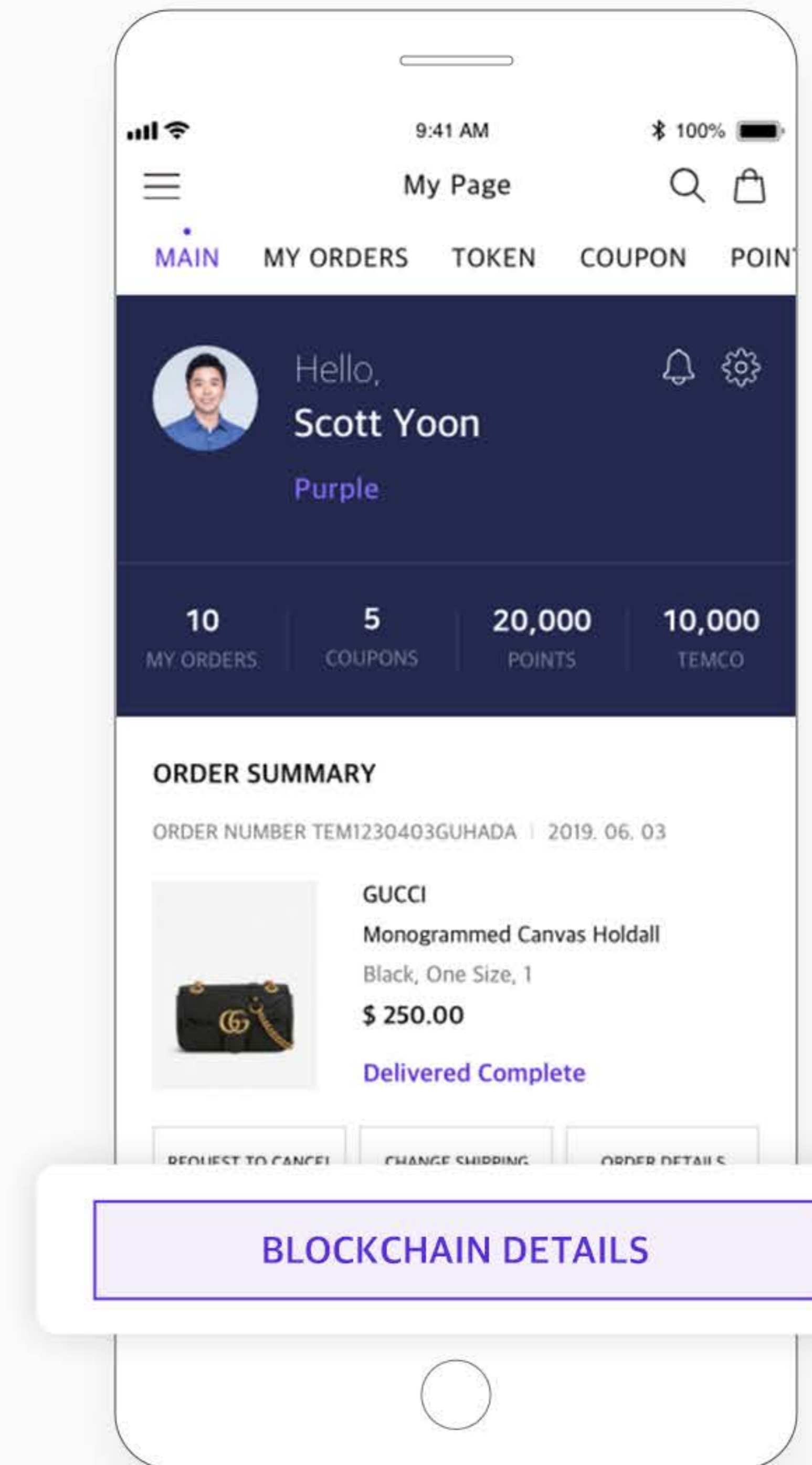
1. User confirms the product to purchase



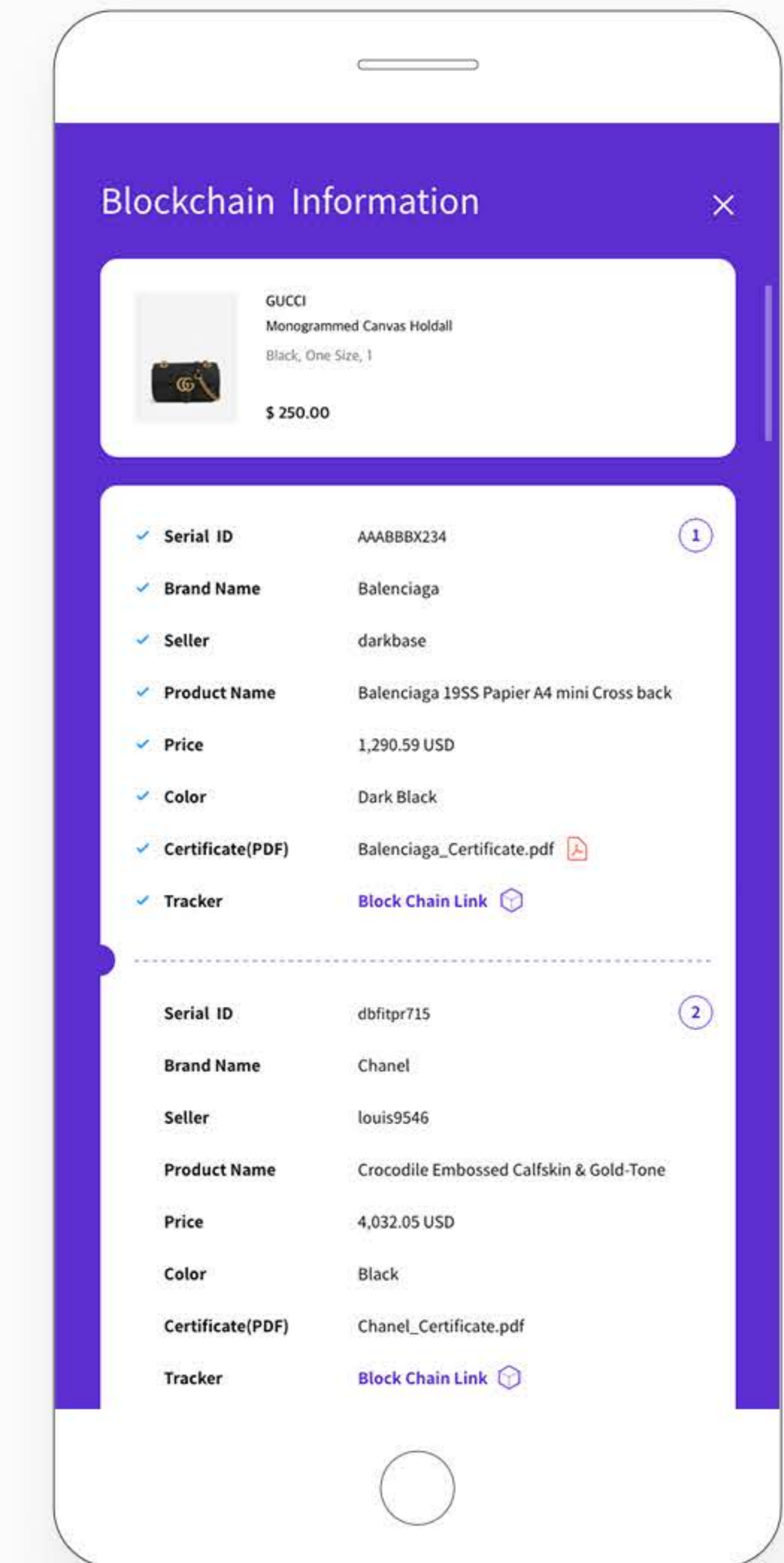
2. User confirms the payment options



3. The order is completed with TEMCO Tokens



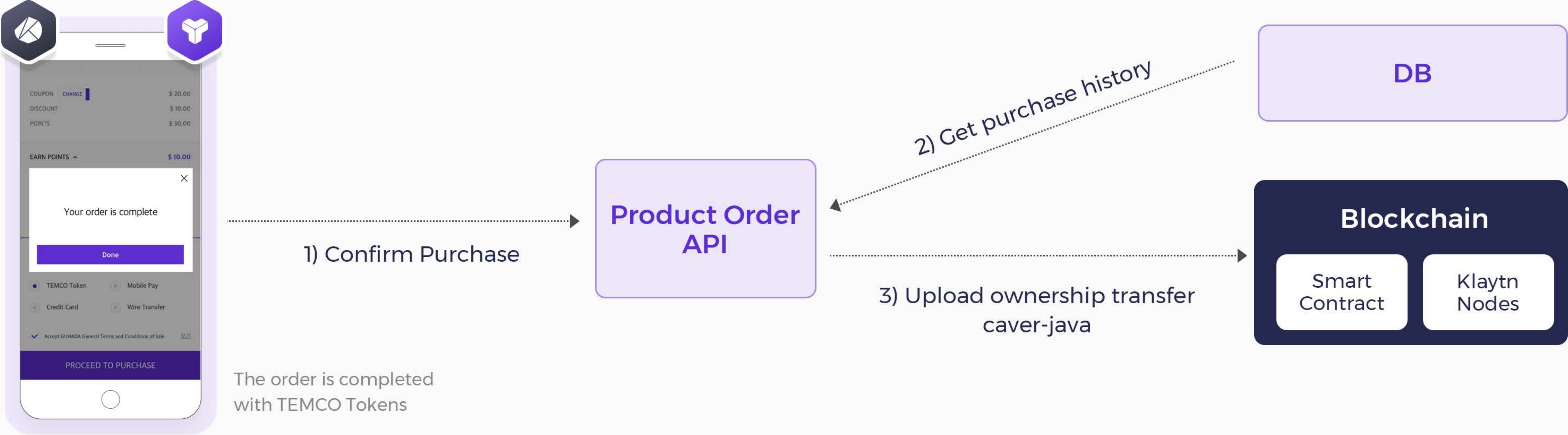
4. User checks the order summary through blockchain



5. Detailed order data in "Blockchain Information"



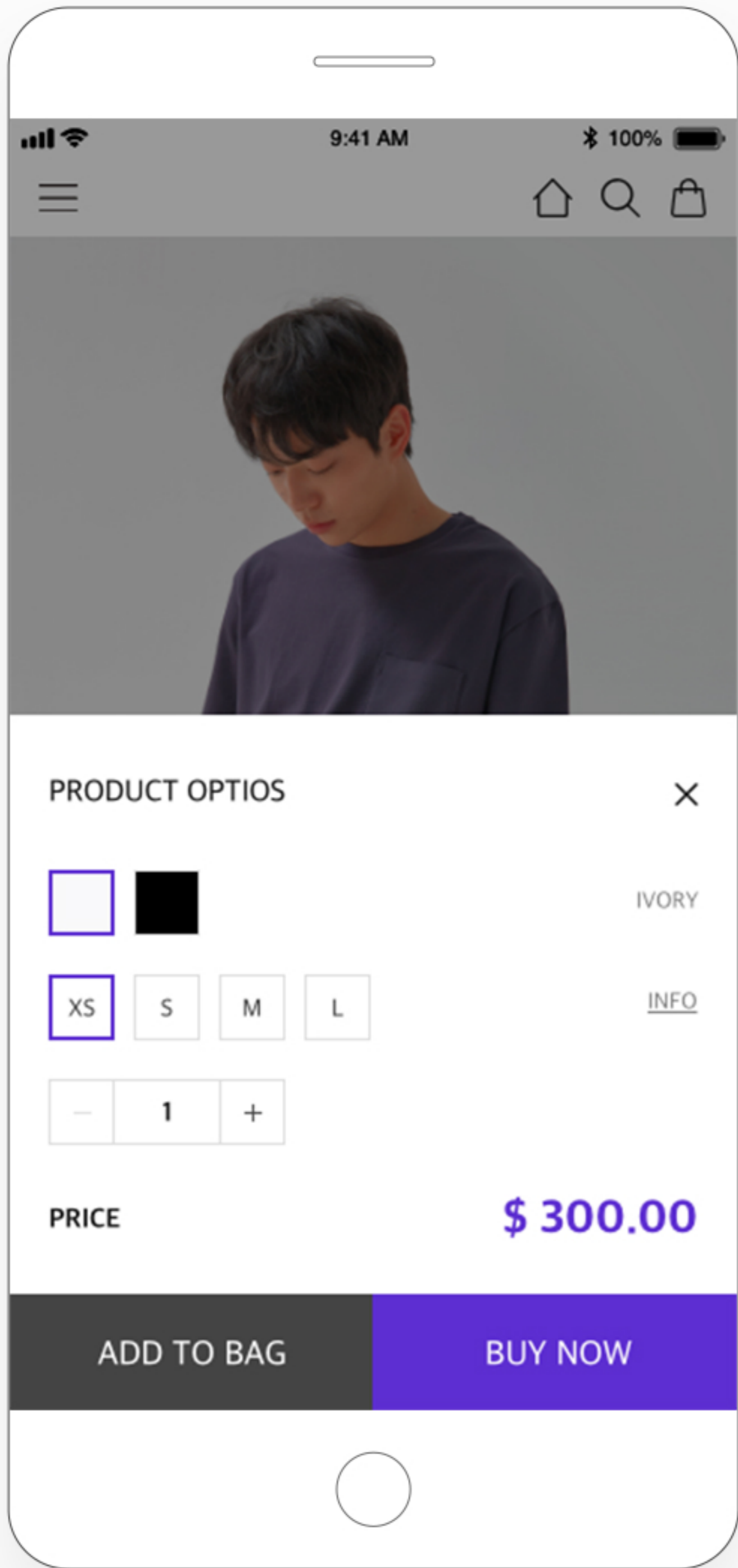
# Purchase confirmation by user



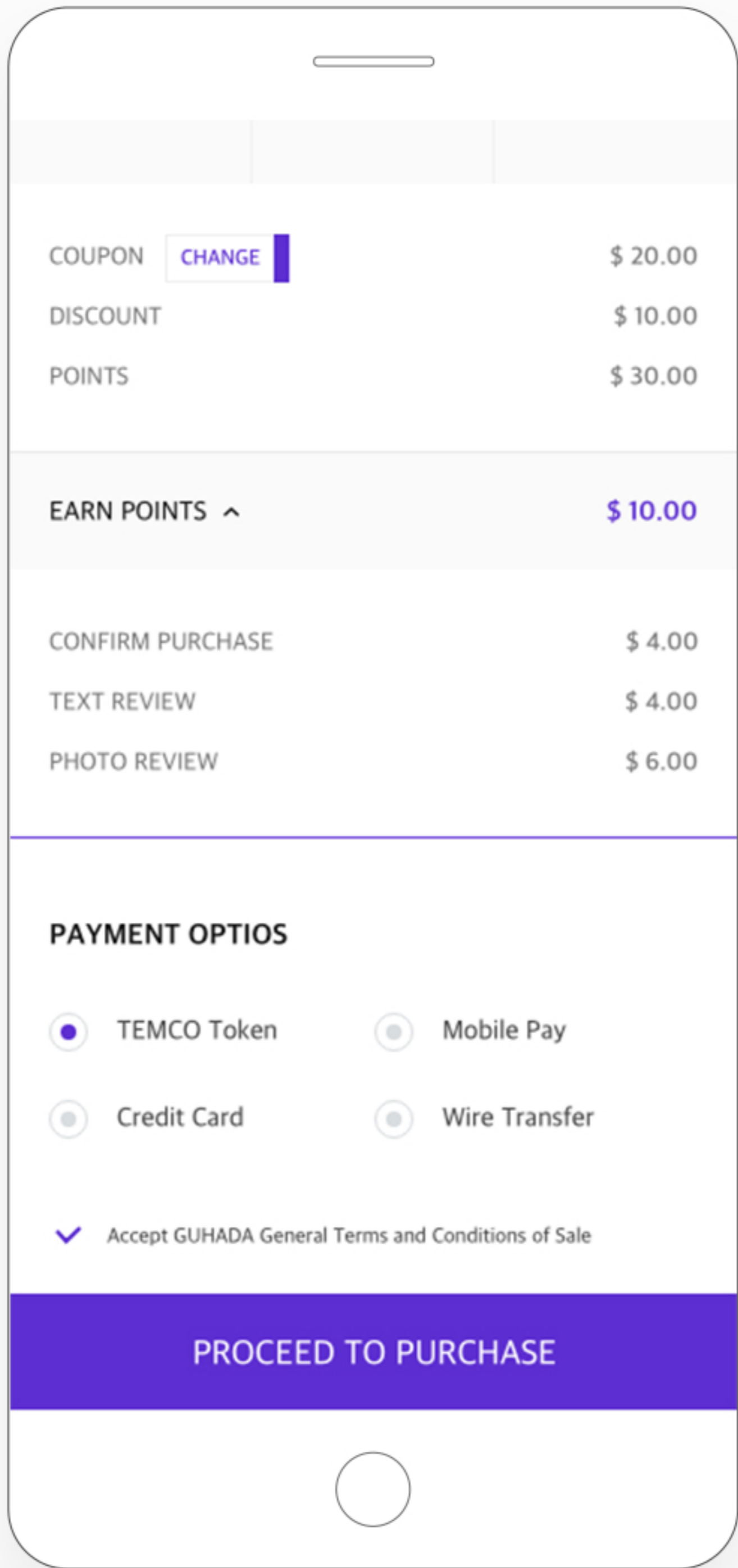
# Auto purchase confirmation [2 weeks later after user buy product]



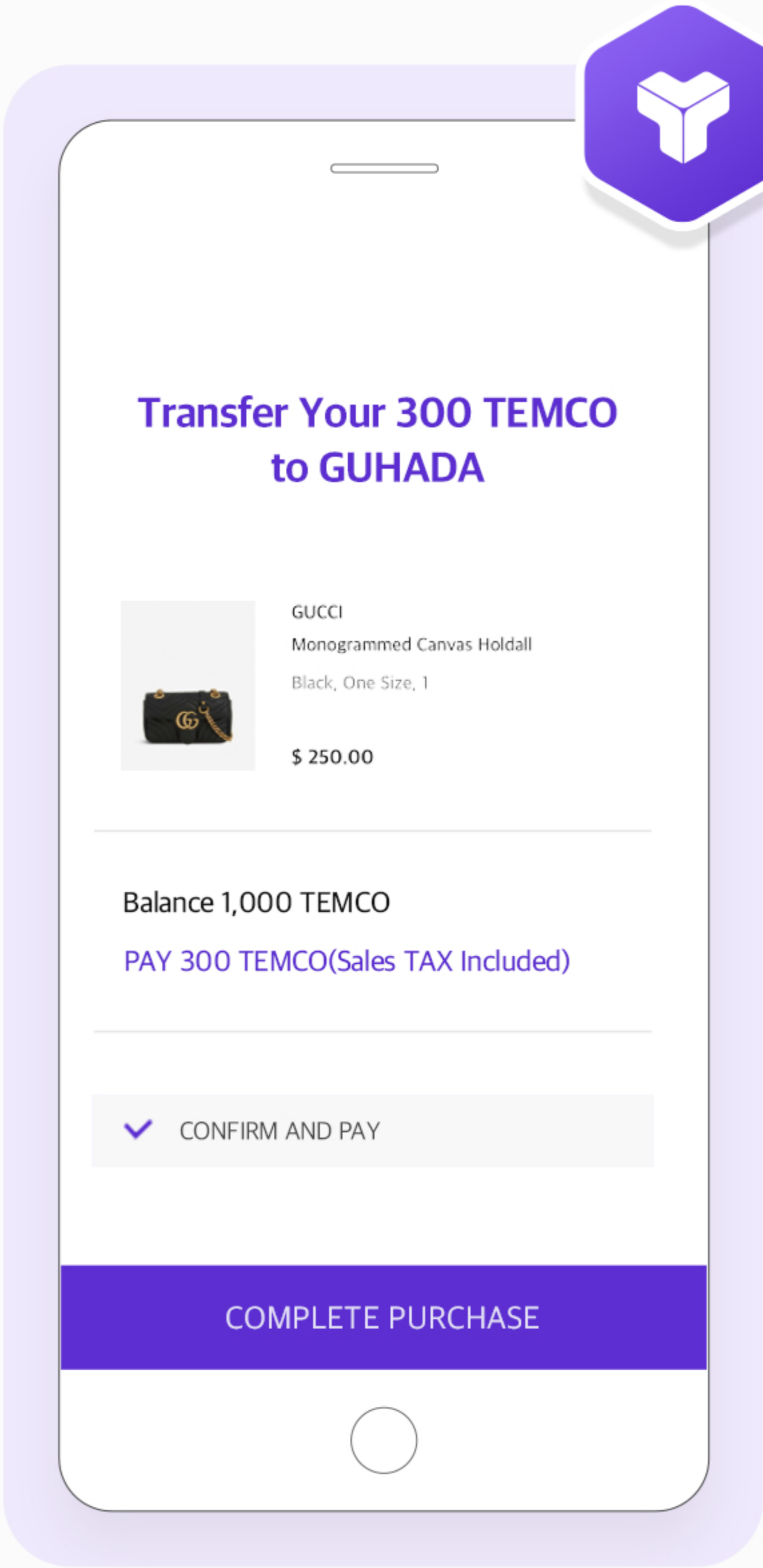
# CRYPTO PAYMENT



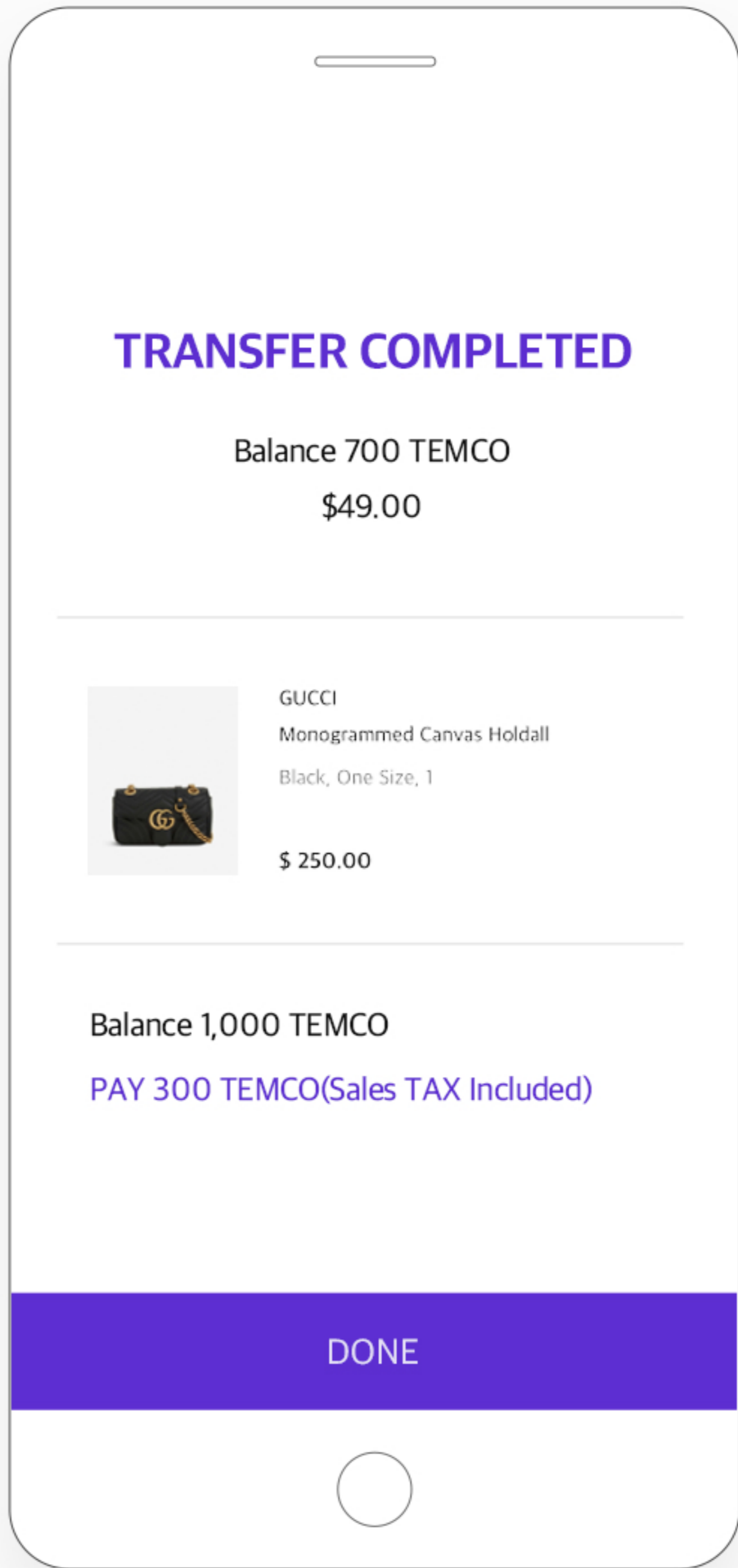
1. User confirms the product to purchase



2. User selects the "TEMCO Token" in payment options

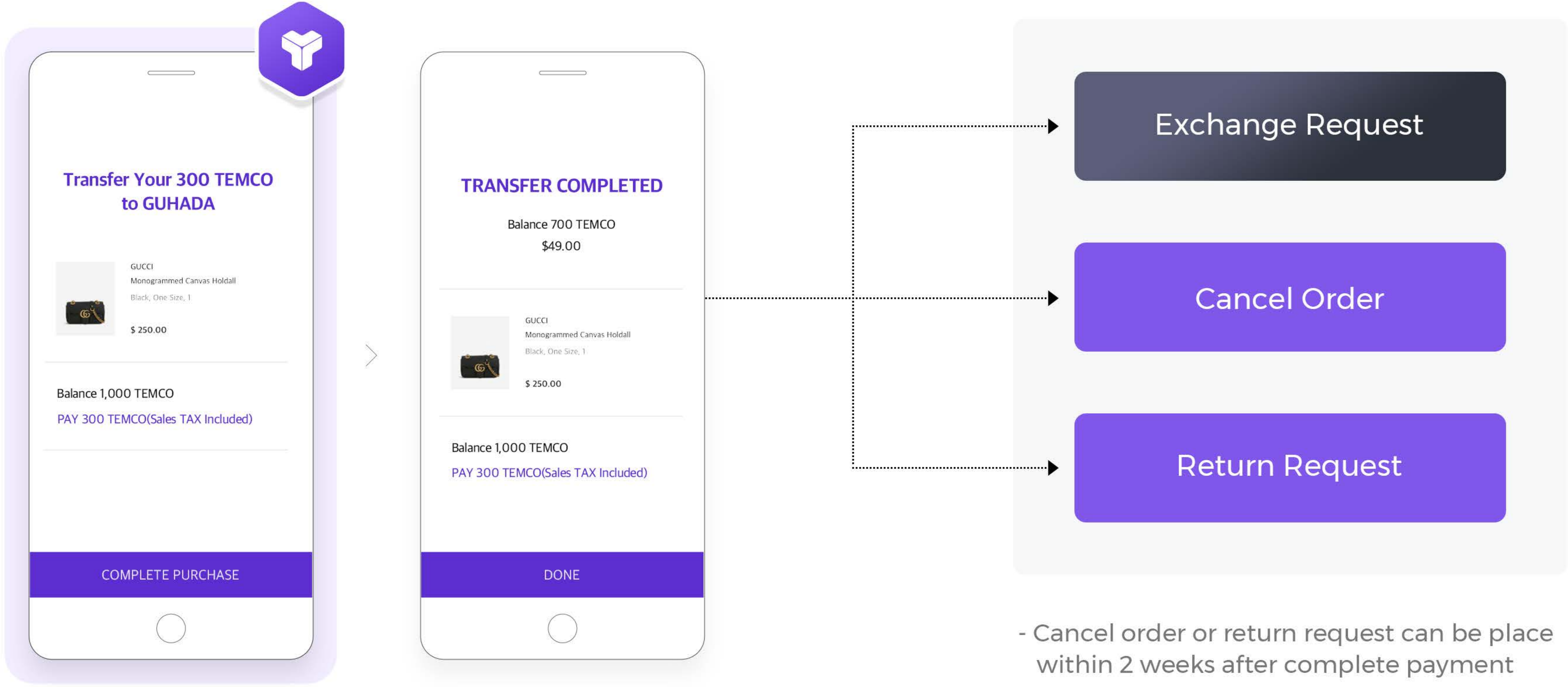


3. User confirms the payment details



4. Token payment completed

# CRYPTO PAYMENT

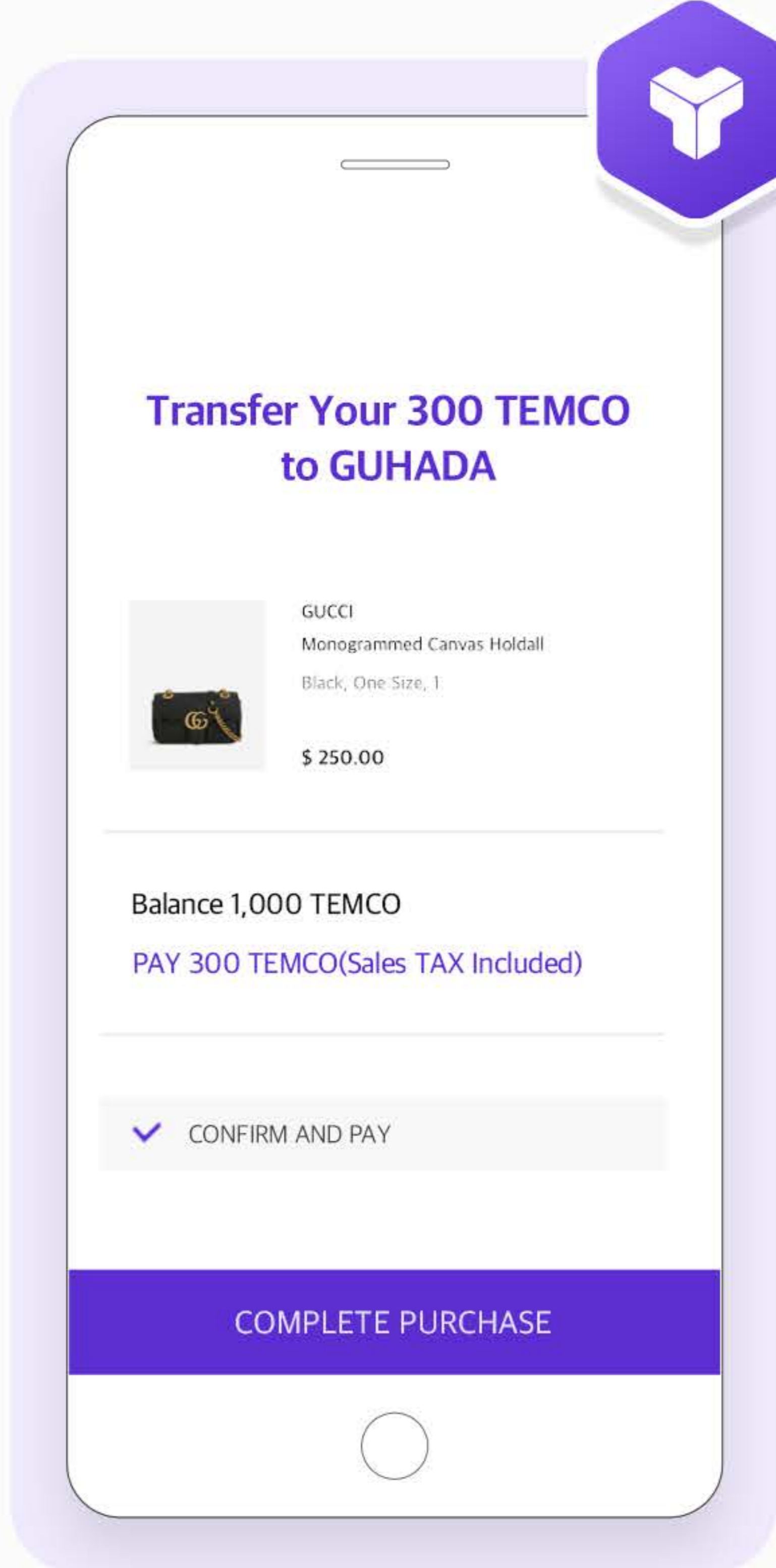


User confirms the payment details

Token payment completed

- Cancel order or return request can be place within 2 weeks after complete payment
- Paid token price could be huge difference

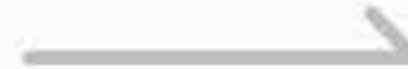
# CRYPTO PAYMENT



User confirms the payment details



REFUND

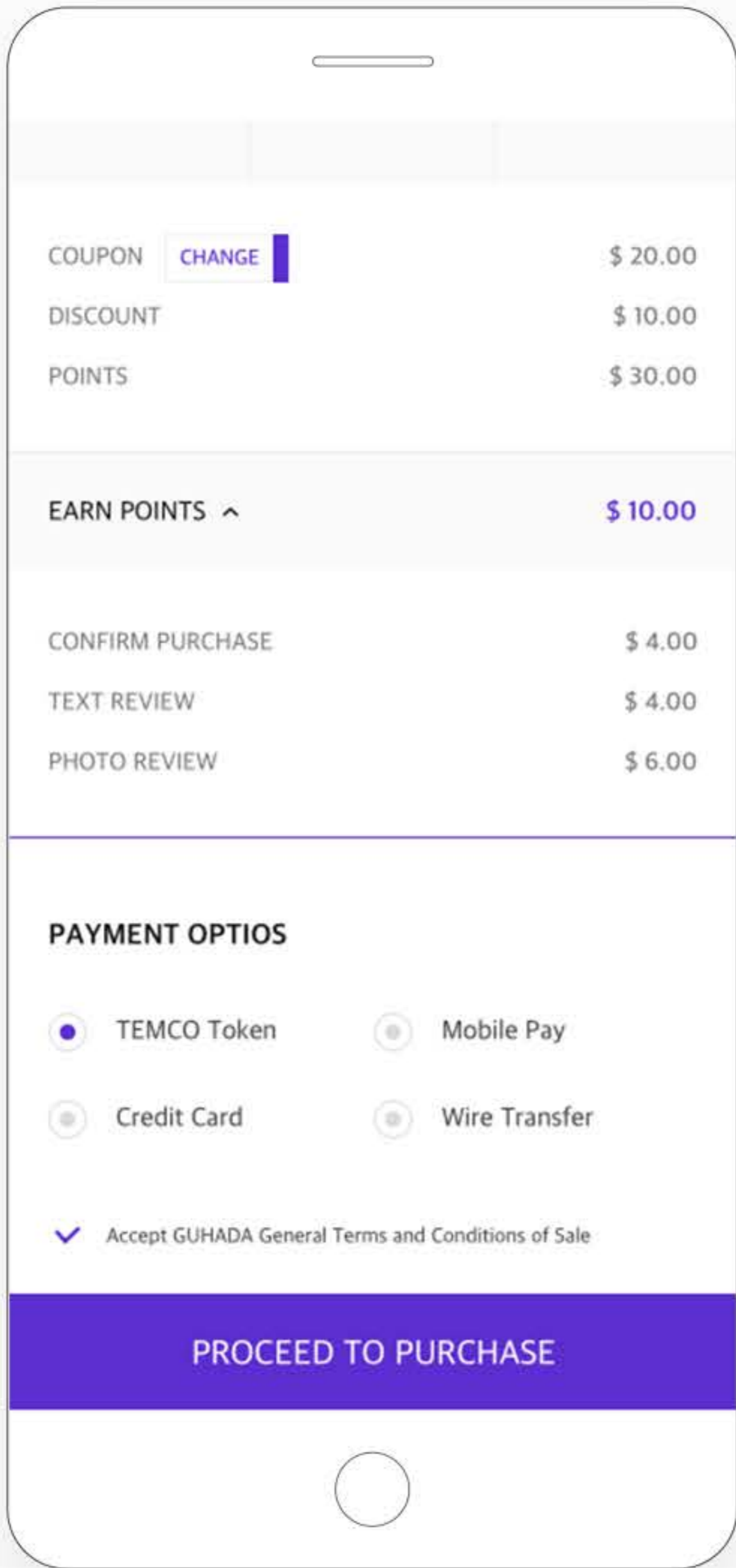


TEMCO  
Token



GUHADA  
Point

# CRYPTO PAYMENT



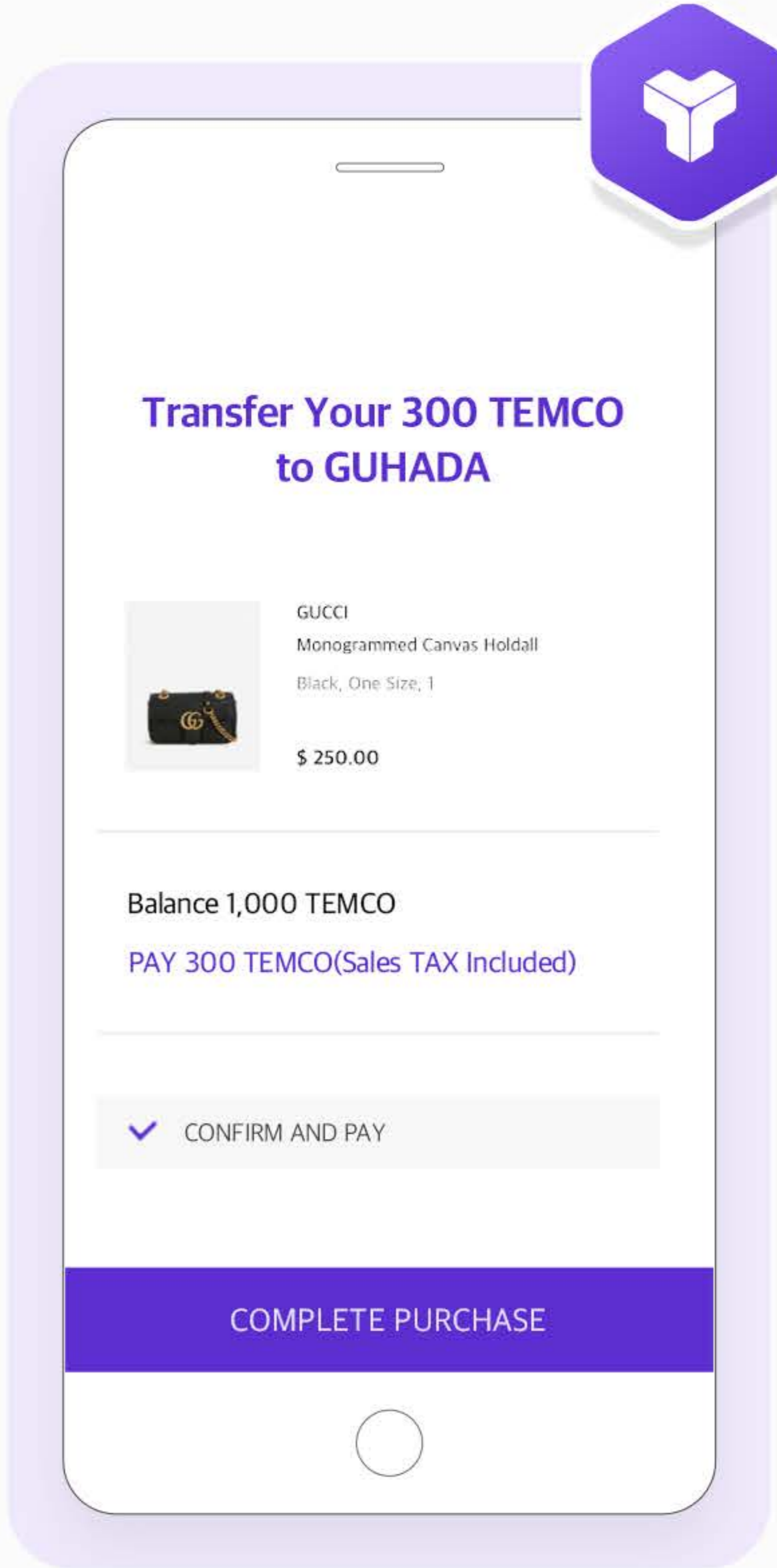
User selects the "TEMCO Token" in payment options



TEMCO  
Token

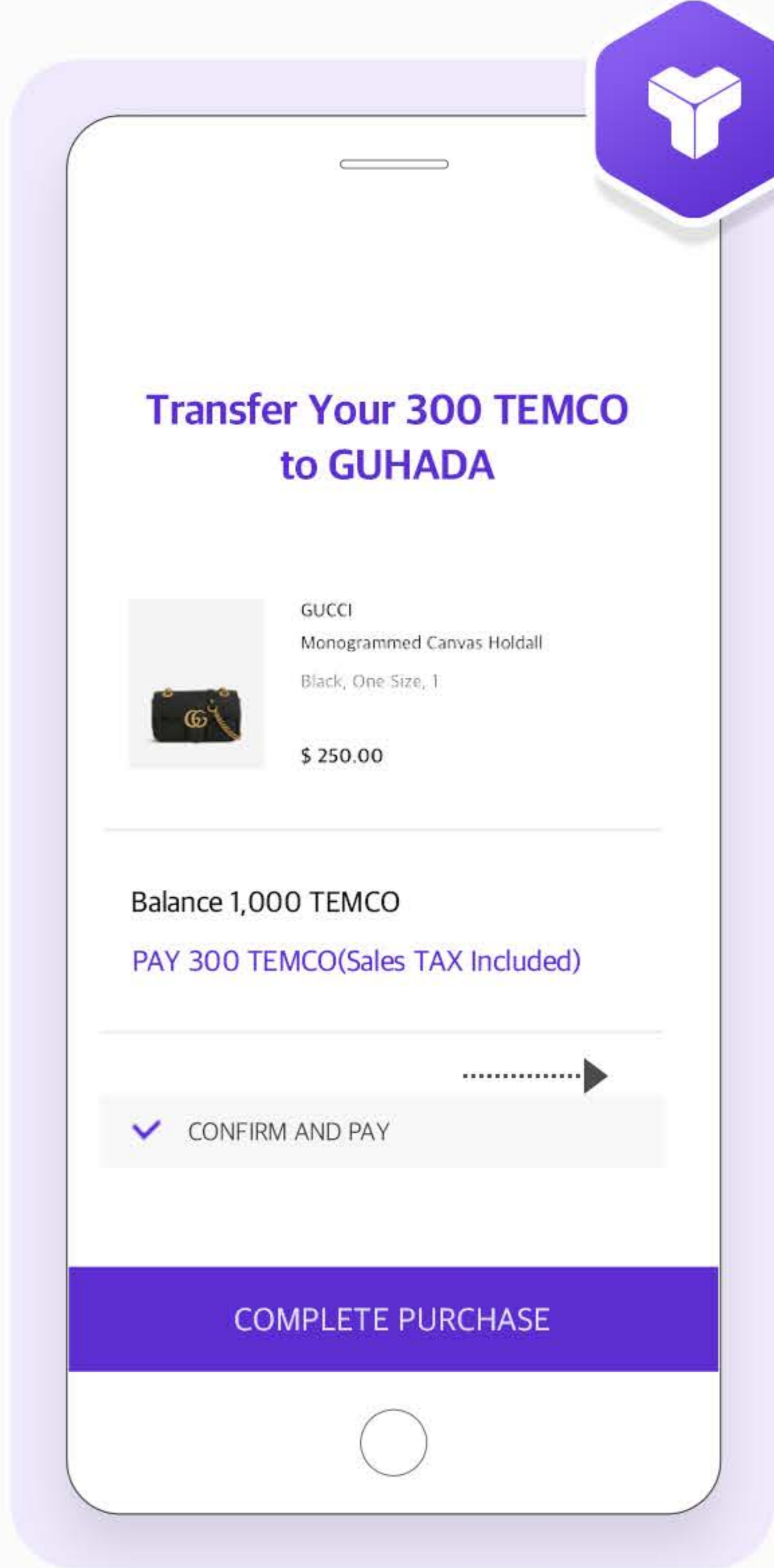


GUHADA  
Point

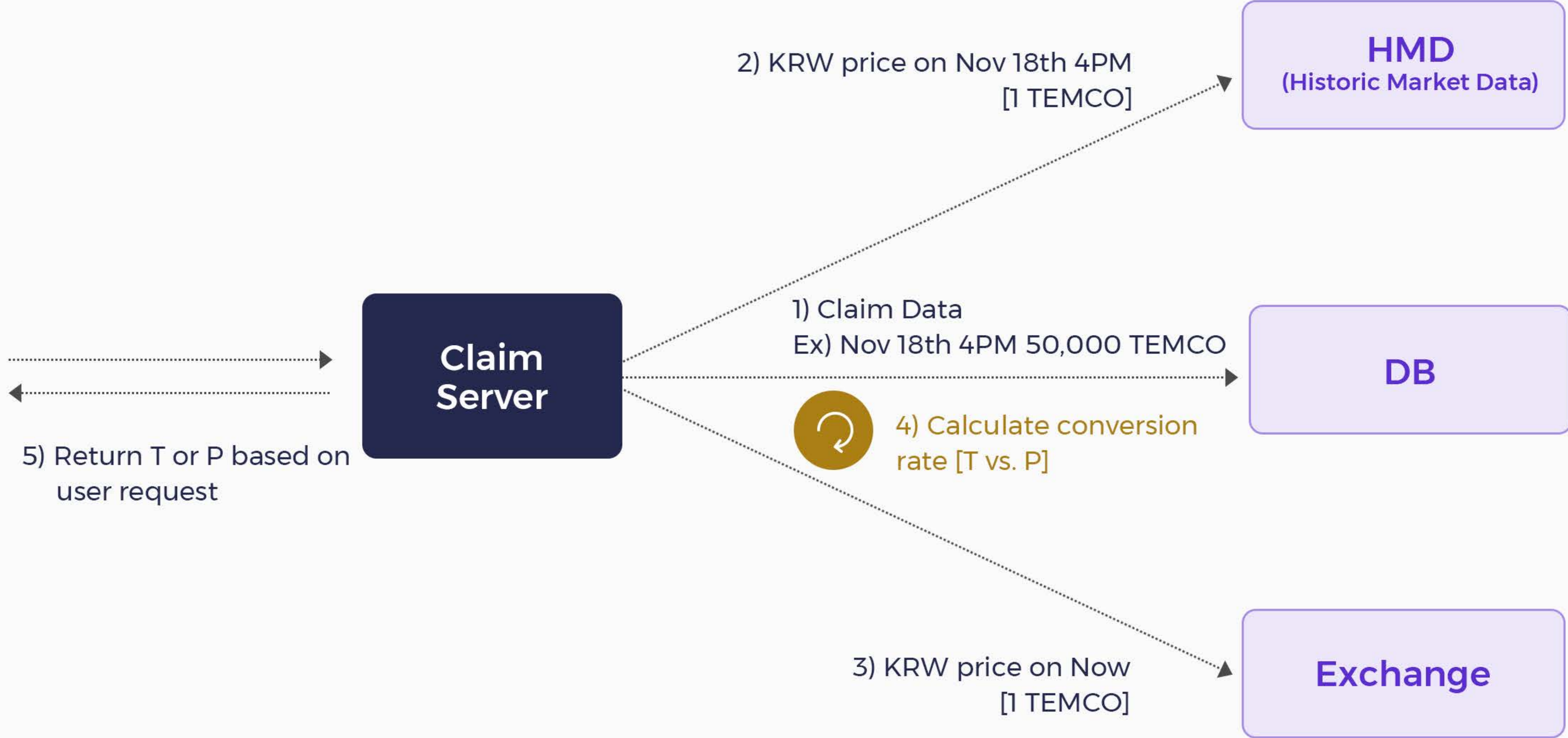


User confirms the payment details

# CRYPTO PAYMENT

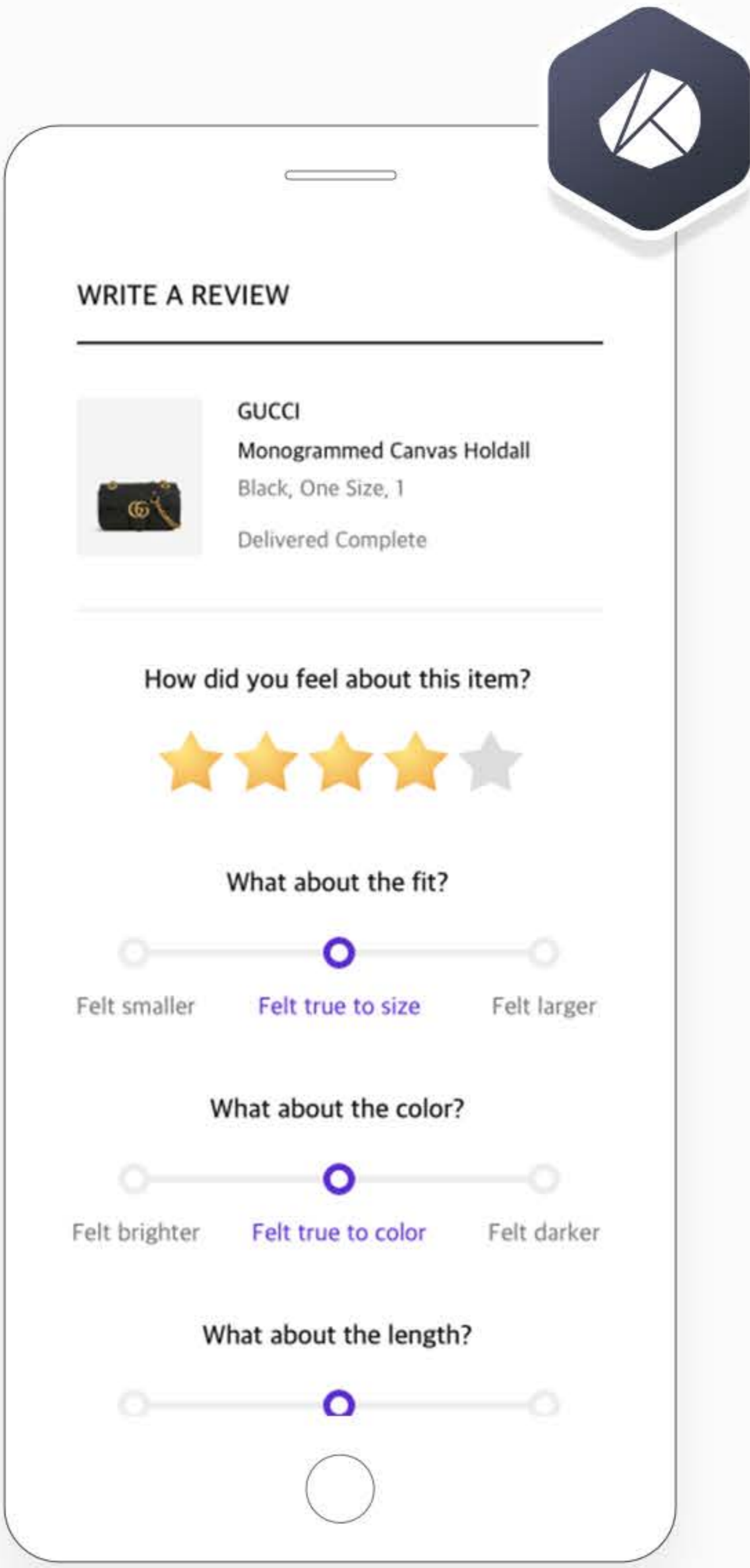


User confirms the payment details

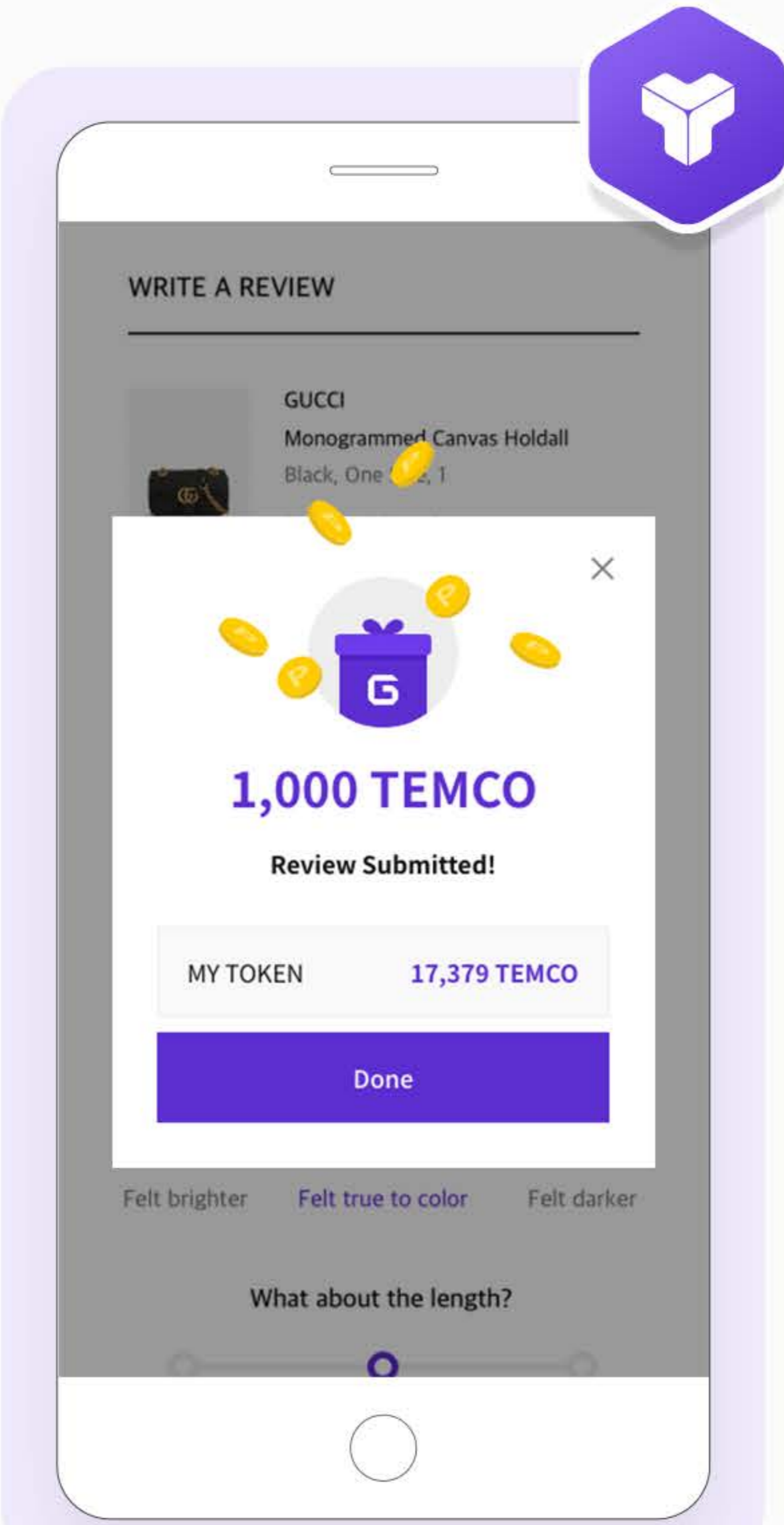


# COMMUNITY REWARDS

## REVIEW

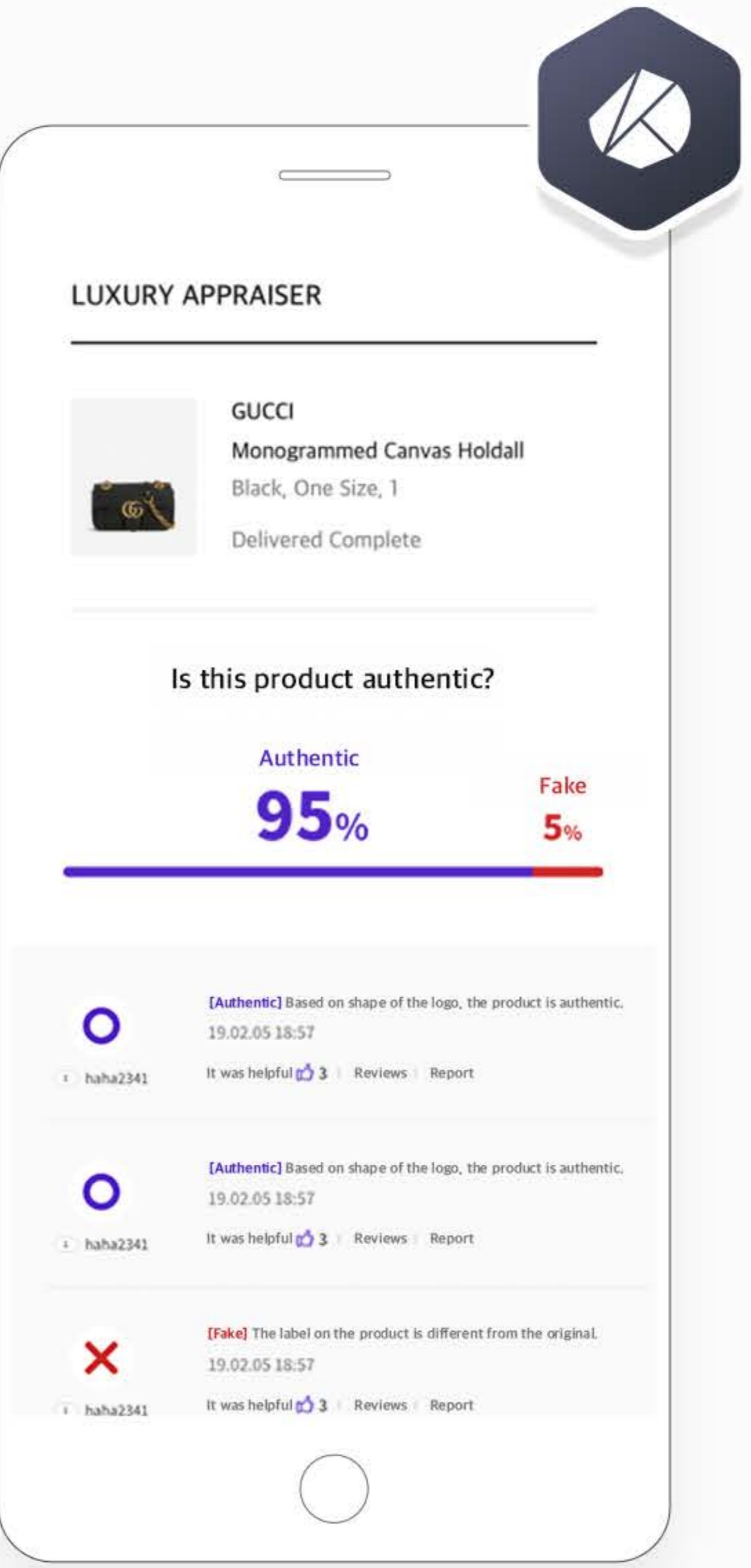


1. User writes product review

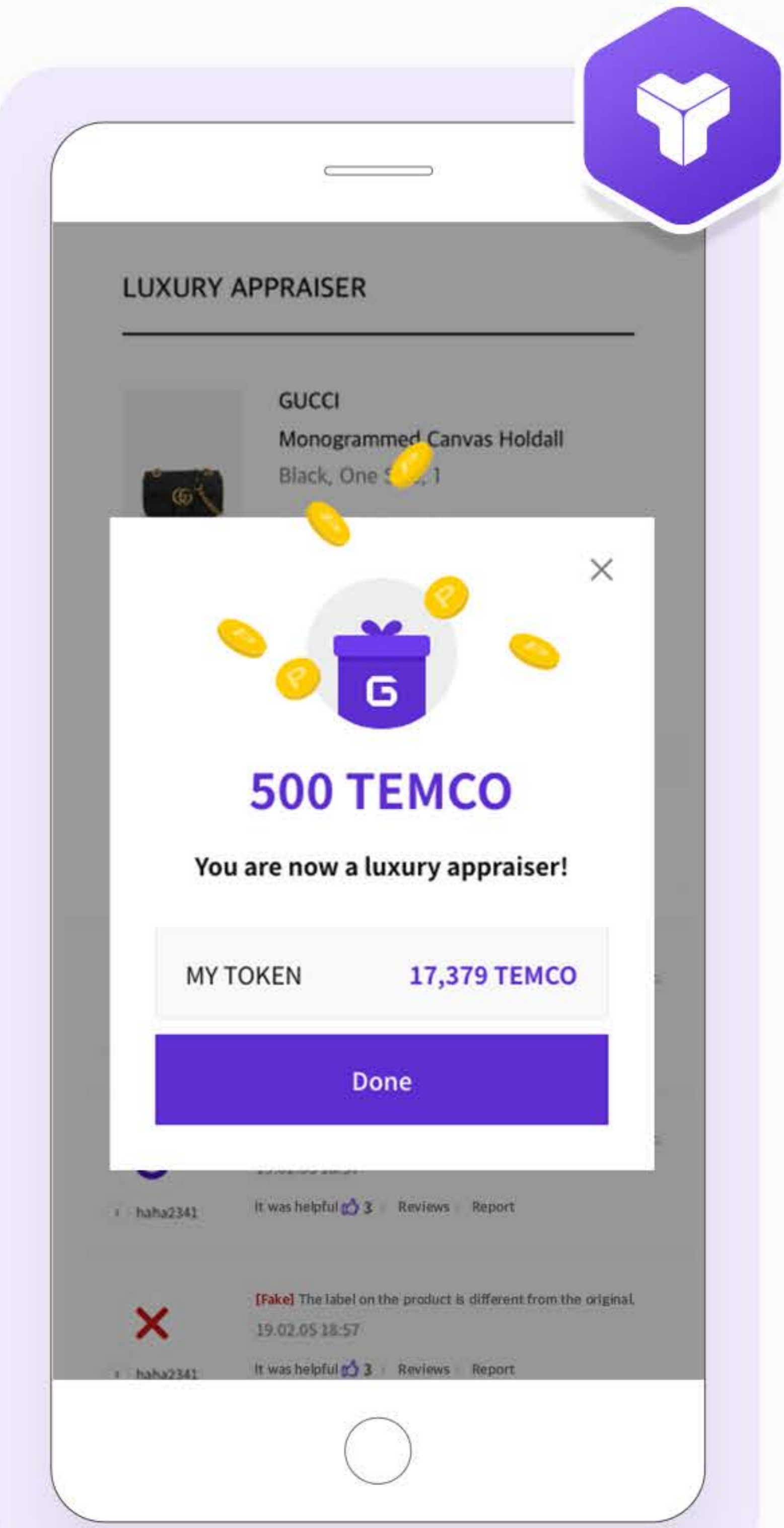


2. User receives reward points

## Q&A

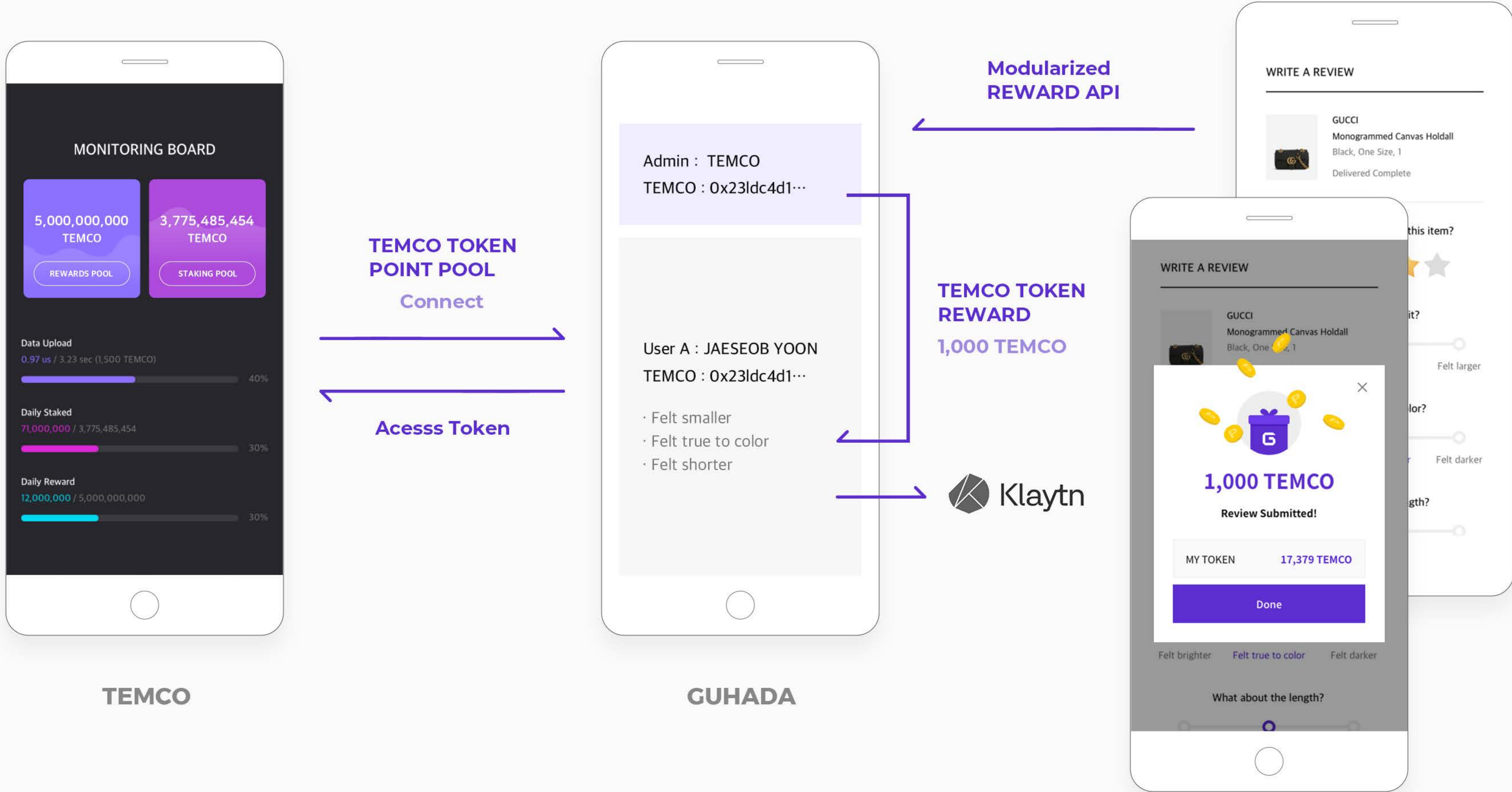


1. User answers authentication inquiry



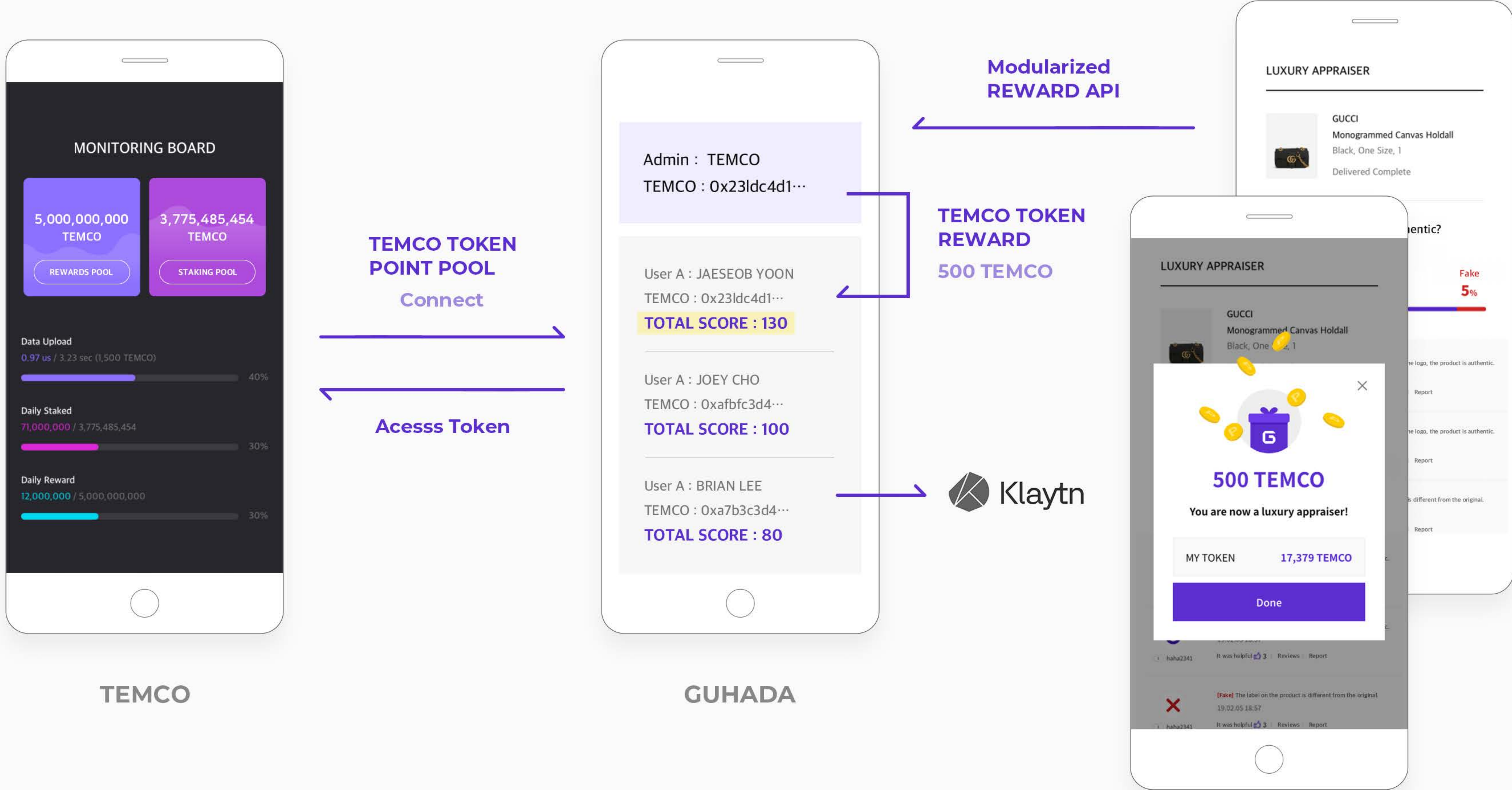
2. User receives reward points

# BLOCKCHAIN INCENTIVE STRUCTURE FOR PRODUCT REVIEW

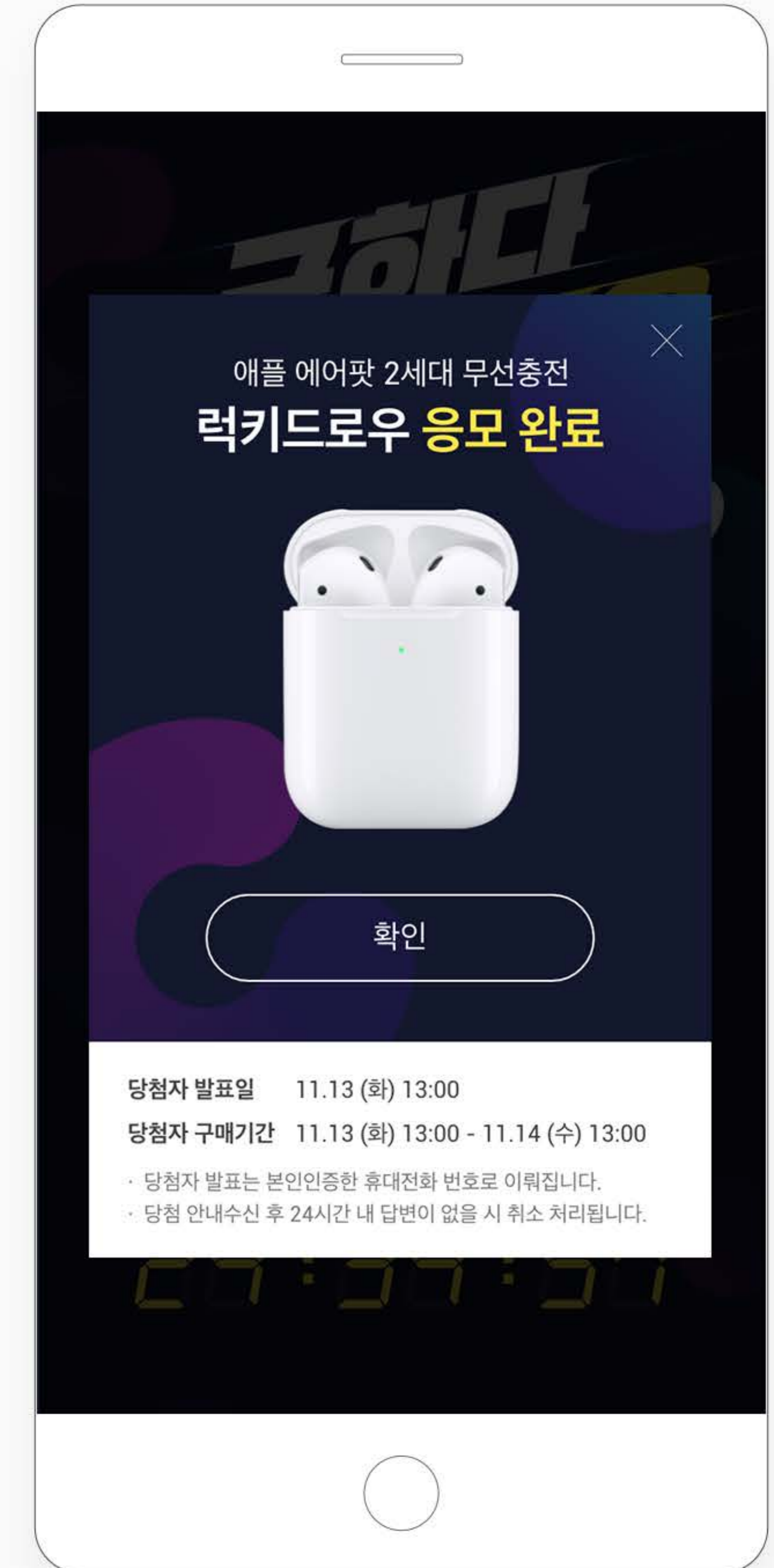
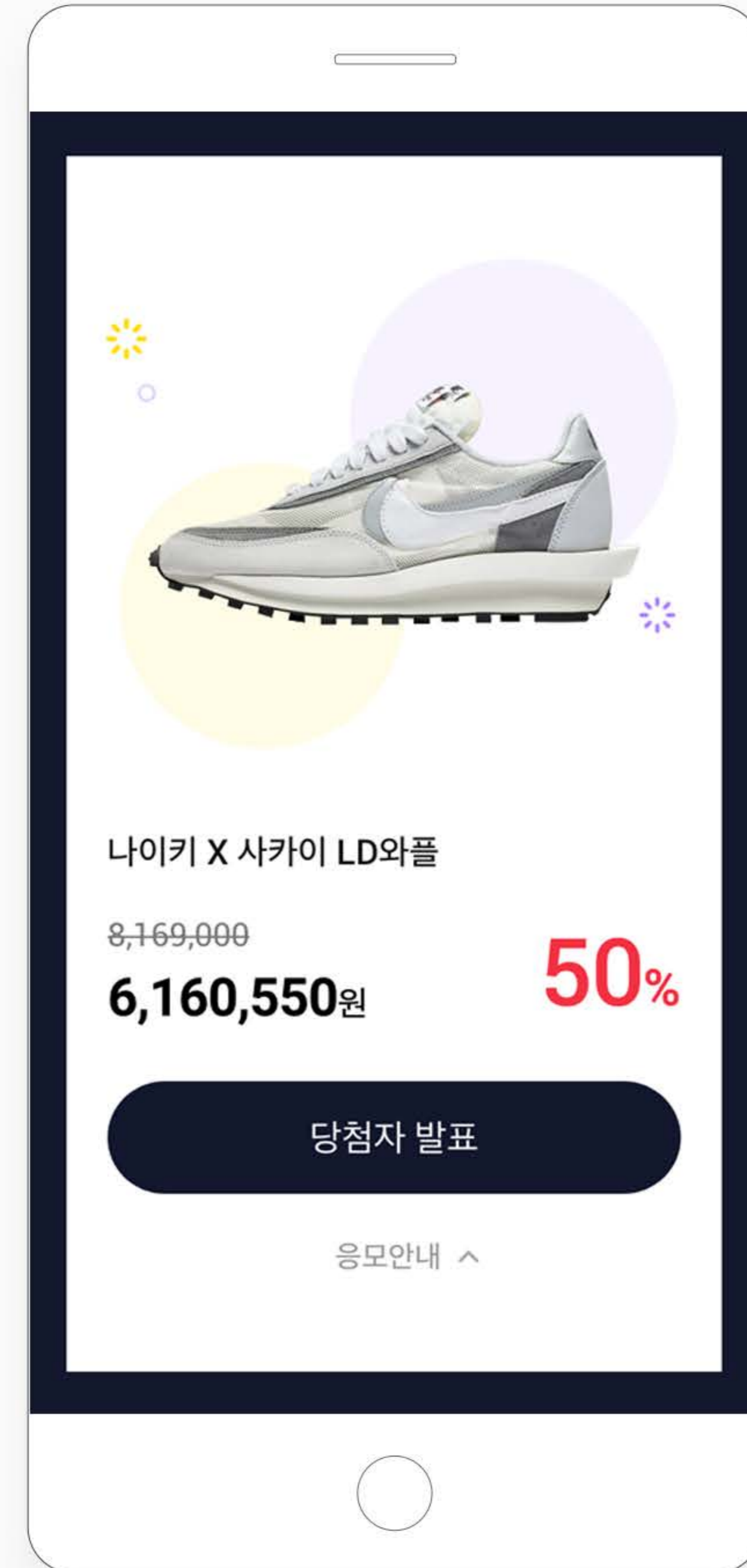
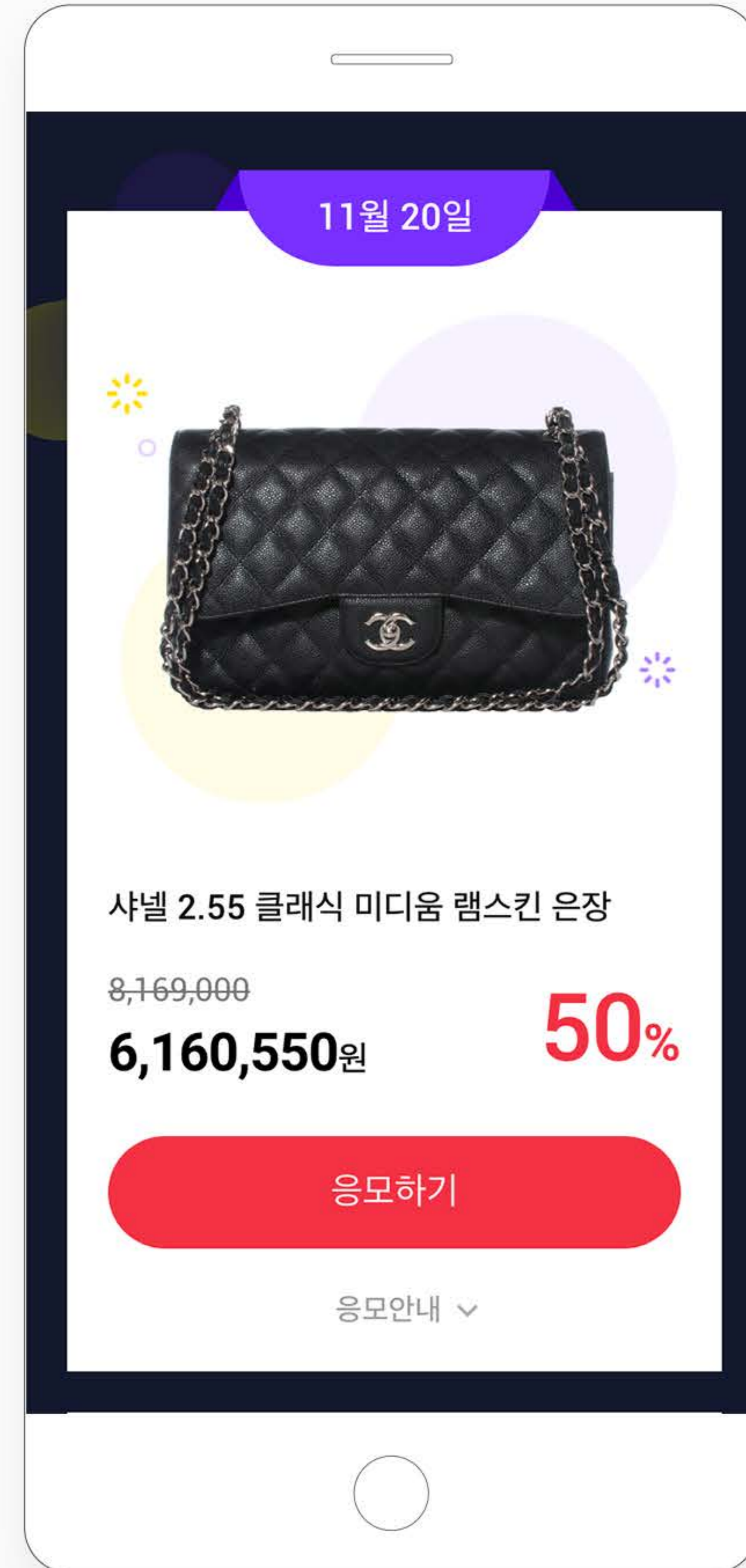




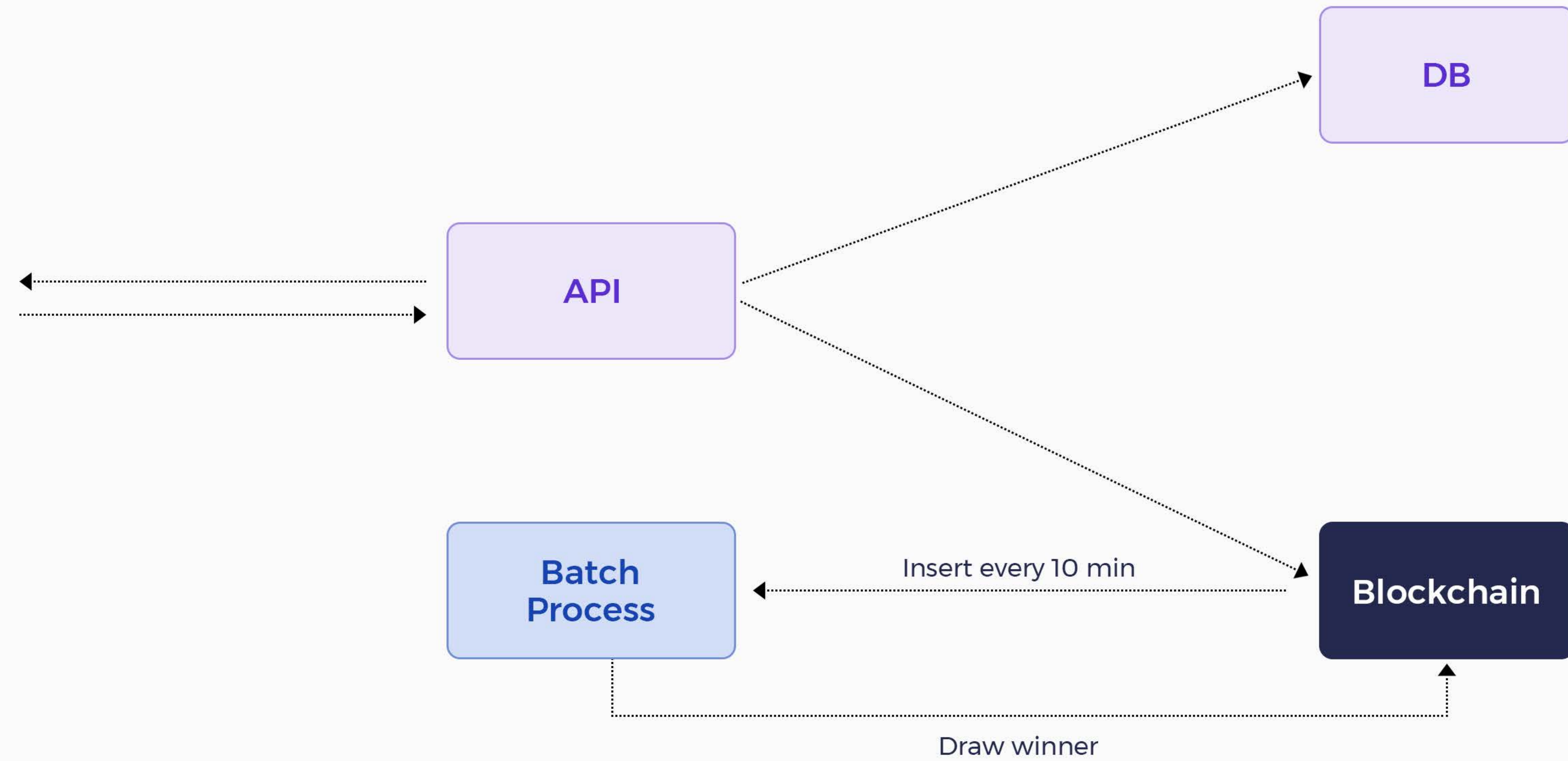
# BLOCKCHAIN INCENTIVE STRUCTURE FOR Q&A



# LUCKY DRAW



# LUCKY DRAW



# LUCKY DRAW

## Java

Math.random()

Random()

Solidity → ?

## Issues

Expensive algorithm cost too much

Solidity code should be deterministic (majority of miners have to obtain the same result when evaluating a transaction to reach consensus)

```
contract LuckyDraw {  
  
    struct EntryUser {  
        uint dealId;  
        uint userId;  
        string userEmail;  
    }  
  
    mapping(string => EntryUser) public entryUsers; // 응모한 유저정보  
    mapping(uint => string[]) public luckyDrawEntrys; // 게임(딜아이디안에 게임에 응모한 유저유니크 키값을 저장  
    mapping(uint => string) public luckyDrawWinner; // 게임 당첨자정보(해당 게임의 딜 아이디로 당첨자 확인)  
  
    function entry(string memory eventId, uint dealId, uint userId, string memory userEmail) public {  
        entryUsers[eventId] = EntryUser(dealId, userId, userEmail);  
        string[] storage transactions = luckyDrawEntrys[dealId];  
        transactions.push(eventId);  
        luckyDrawEntrys[dealId] = transactions;  
    }  
  
    function draw(uint dealId) public returns(string memory){  
        uint limit = luckyDrawEntrys[dealId].length;  
        uint random = randomNumber(limit);  
        luckyDrawWinner[dealId] = luckyDrawEntrys[dealId][random];  
    }  
  
    function randomNumber(uint limit) internal returns (uint) {  
        return uint8(uint256(keccak256(abi.encodePacked(block.timestamp, block.difficulty)))%limit);  
    }  
  
    function destoryDrawItem(uint dealId) public {  
        delete luckyDrawEntrys[dealId];  
    }  
}
```

**THANK YOU .**