# Gift Card Management Platfrom using Mysql

## **Core Features:-**

- 1. Gift Card Generation: Ability to generate unique gift cards with customizable initial balances and expiration dates. For this i have make a procedure name "generate\_gift\_cards" to generate a single card and "bulk\_generate\_gift\_cards" to generate a bulk gift cards and after generating bulk gift card I have created another procedure name "assign gift card to user" which will help to assign card to the user id.
- 2. Gift Card Redemption & Fraud Detection: Mechanism for redeeming gift cards, deducting the redeemed amount from the balance. For this i have make procedure name "redeem\_gift\_card". While redeeming the gift card it will also simultaneously check that it is fraud transaction or not.
- **3. Balance Tracking:** Real-time tracking and querying of gift card balances. For this I have make a table name "gift cards" in which will help to check the real time balance.
- **4. Transaction Logging:** Maintain a complete transaction history for each gift card, including redemptions and recharges. For this I have make a table name "gift\_card\_transaction\_table", this table will help us to maintain transaction of cards;
- **5. Gift Card Expiry & automatic expiry handling:** Automatic handling of expired cards, preventing further usage. For this I have created a procedure name "expire\_gift\_card" which will help us to maintain records of expiry cards and it will also handle the automatic expiry.
- **6. User Association:** Optionally associate gift cards with users (support both as signed and unassigned cards). This feature is included in the procedure name **"bulk\_generate\_gift\_cards"** it will generate a bulk cards without assigning to the user and its status by default will be **"inactive"** to prevent wrong redemption of the card after generating bulk cards we can assign one of the card to the user.
- 7. Gift Card Status Management: Support for activating, deactivating, and blocking gift cards. For this I have created a procedure name "update\_gift\_card\_status" which will help to manage the status of the cards like "active", "inactive", "blocked", "expired", which will help us to sort out the cards on the basis on its status.

#### 8. Reporting:

## **Gift Card Summary:**

- Total number of cards.
- Number of cards by status (active, inactive, blocked, expired).
- Total initial balance and total current balance (available funds).
- Cards per user.

#### **Transaction Summary:**

- Total transaction count by type (redemption, recharge, transfer\_in, transfer\_out).
- Total amounts per transaction type.
- Transactions by user or card.
- Transaction history per card.

#### **Activity and Usage:**

- Redemption amounts and frequency over time (daily, monthly).
- Recharge activity over time.
- Transfers between users.
- Expired cards count.

# **Bonus Features:-**

**Partial Redemption Support:** Allow partial usage of gift card balance in multiple transactions. This feature is used in procedure name "redeem\_gift\_card" which checks if amount <= current balance.

**Gift Card Recharge:** Enable recharging of existing gift cards. This feature is used in procedure name "recharge gift card" which allows to make recharge.

**Bulk Gift Card Generation:** Efficiently generate multiple gift cards at once. This feature is used in procedure name "bulk\_generate\_gift\_cards" to generate bulk gift card.

**Gift Card Transfer:** Allow transferring a gift card from one user to another. This feature is used in procedure name "**transfer\_gift\_card**" which allows to transfer card to another user id.

**Fraud Detection:** Implement basic checks to detect and prevent suspicious activities. This feature is used in procedure name "**redeem\_gift\_card**" which redeem gift card as well as simultaneously also check fraud detection and unless the updated user\_id doesn't match to the card the redemption doesn't occur.

**Assignning Card:** I have made an extra procedure name "assign\_gift\_card\_to\_user" which help us to assign card to the user from the bulk cards to save our time.

## Source Code

#### First of all we create a Database name Gift Card Platform and we will use it

```
create database gift_card_platform;
use gift_card_platform;
```

Then we will create a table of users, gift cards, gift card transactions

```
■ User Table
```

```
CREATE TABLE users (
    user_id INT unique AUTO_INCREMENT PRIMARY KEY,
    username VARCHAR(100) UNIQUE NOT NULL,
    email VARCHAR(255) UNIQUE NOT NULL,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);

Gift card table

CREATE TABLE gift_cards (
    card_id CHAR(7) PRIMARY KEY,
    initial_balance DECIMAL(10,2) NOT NULL,
    current_balance DECIMAL(10,2) NOT NULL,
    expiration_date_DATE_NOT_NULL,
```

user\_id INT NULL, created at TIMESTAMP DEFAULT CURRENT TIMESTAMP,

status ENUM('active', 'inactive', 'blocked', 'expired') DEFAULT 'active',

updated\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP ON UPDATE CURRENT\_TIMESTAMP,

CONSTRAINT fk\_user FOREIGN KEY (user\_id)
REFERENCES users(user\_id)

ON DELETE SET NULL,

CHECK (current\_balance >= 0)
);

#### **■** Transaction table to check redemption, recharge, transfer

```
CREATE TABLE gift_card_transactions (
    transaction_id BIGINT AUTO_INCREMENT PRIMARY KEY,
    card_id CHAR(7) NOT NULL,
    user_id INT NULL,
    transaction_type ENUM('redemption', 'recharge', 'transfer_out', 'transfer_in') NOT NULL,
    amount DECIMAL(10,2) NOT NULL,
    transaction_date TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
    notes VARCHAR(255),
    CONSTRAINT fk_card FOREIGN KEY (card_id)
        REFERENCES gift_cards(card_id)
        ON DELETE CASCADE,
    CONSTRAINT fk_user_tx FOREIGN KEY (user_id)
        REFERENCES users(user_id)
        ON DELETE SET NULL
);
```

#### After creating table we will create a function and procedures

## ■ Function to generate unique card\_id

```
DELIMITER //
CREATE FUNCTION generate_card_id()
RETURNS CHAR(7)
DETERMINISTIC
BEGIN
  DECLARE card CHAR(7);
  DECLARE done INT DEFAULT 0;
  REPEAT
    SET card = SUBSTRING(MD5(RAND()), 1, 7);
    -- Check if card exists
    IF (SELECT COUNT(*) FROM gift_cards WHERE card_id = card) = 0 THEN
      SET done = 1;
    END IF;
  UNTIL done = 1 END REPEAT;
  RETURN card;
END //
                     ■ Generate single gift card
DELIMITTER //
CREATE PROCEDURE generate_gift_card (
  IN init_balance DECIMAL(10,2),
  IN expiry DATE,
  IN associated user INT,
  OUT out_card_id CHAR(7)
)
BEGIN
  DECLARE new card CHAR(7);
  SET new card = generate card id();
  INSERT INTO gift_cards(card_id, initial_balance, current_balance, expiration_date, user_id)
  VALUES (new_card, init_balance, init_balance, expiry, associated_user);
  SET out card id = new card;
END //
                     ■ Bulk Gift Card Generate
```

```
DELIMITER //

CREATE PROCEDURE bulk_generate_gift_cards (
IN count INT,
```

```
IN init_balance DECIMAL(10,2),
  IN expiry DATE,
  IN associated_user INT
)
BEGIN
  DECLARE i INT DEFAULT 0;
  DECLARE new card CHAR(7);
  -- Validate input parameters
  IF count <= 0 THEN
    SIGNAL SQLSTATE '45000'
    SET MESSAGE_TEXT = 'Count must be a positive integer';
  END IF;
  IF init_balance <= 0 THEN
    SIGNAL SQLSTATE '45000'
    SET MESSAGE TEXT = 'Initial balance must be positive';
  END IF;
  IF expiry <= CURDATE() THEN
    SIGNAL SQLSTATE '45000'
    SET MESSAGE_TEXT = 'Expiration date must be in the future';
  END IF;
  -- Start transaction for bulk operation
  START TRANSACTION;
  -- Generate the specified number of gift cards
  WHILE i < count DO
    SET new_card = generate_card_id();
    -- Insert with explicit 'inactive' status
    INSERT INTO gift_cards(
      card id,
      initial_balance,
      current_balance,
      expiration_date,
      user_id,
      status
    )
    VALUES (
      new card,
      init_balance,
      init_balance,
      expiry,
      associated_user,
      'inactive' -- Explicitly set status to inactive
    );
    SET i = i + 1;
  END WHILE;
```

```
COMMIT;
  -- Return success message
  SELECT CONCAT('Successfully generated', count, 'inactive gift cards') AS message;
END //
DELIMITER;
                         Redeem Gift Card
CREATE PROCEDURE redeem gift card (
  IN p_card_id CHAR(7),
  IN p user id INT,
  IN p_amount DECIMAL(10,2),
  OUT p_success BOOLEAN,
  OUT p_message VARCHAR(255)
)
BEGIN
  DECLARE v_balance DECIMAL(10,2);
  DECLARE v_status ENUM('active', 'inactive', 'blocked', 'expired');
  DECLARE v expired BOOL;
  DECLARE v_user_id INT;
  proc_end: BEGIN
    -- Card existence and lock the row for concurrency safety
    SELECT current balance, status, (expiration date < CURDATE()), user id
    INTO v_balance, v_status, v_expired, v_user_id
    FROM gift_cards
    WHERE card id = p card id
    FOR UPDATE;
    -- If no row found (card doesn't exist)
    IF v_user_id IS NULL AND v_balance IS NULL THEN
      SET p_success = FALSE;
      SET p message = 'Gift card not found';
      LEAVE proc_end;
    END IF;
    -- Check ownership: user must match assigned user id
    IF v user id IS NULL OR v user id != p user id THEN
      SET p success = FALSE;
      SET p_message = 'User does not own this gift card or card is unassigned';
      LEAVE proc end;
    END IF;
    -- Update status if expired
    IF v_expired AND v_status != 'expired' THEN
UPDATE gift cards SET status = 'expired', updated at = NOW() WHERE card id = p card id;
      SET p success = FALSE;
      SET p_message = 'Gift card is expired';
      LEAVE proc_end;
```

```
END IF;
    -- Check card status
    IF v_status != 'active' THEN
      SET p_success = FALSE;
      SET p_message = CONCAT('Gift card status is ', v_status);
      LEAVE proc end;
    END IF;
    -- Balance check
    IF v_balance < p_amount THEN
      SET p success = FALSE;
      SET p_message = 'Insufficient balance';
      LEAVE proc_end;
    END IF;
    -- Basic fraud detection
    IF p amount > 1000 THEN
      SET p_success = FALSE;
      SET p message = 'Transaction exceeds allowed limit';
      LEAVE proc end;
    END IF;
    -- Update balance
    UPDATE gift cards
    SET current balance = current balance - p amount,
      updated_at = NOW()
    WHERE card_id = p_card_id;
    -- Log transaction
    INSERT INTO gift card transactions(card id, user id, transaction type, amount, notes)
VALUES (p_card_id, p_user_id, 'redemption', p_amount, 'Redemption');
SET p_success = TRUE;
SET p_message = 'Redemption successful';
END proc_end;
END //
DELIMITER;
                     ■ Recharge Gift Card
DELIMITER //
CREATE PROCEDURE recharge_gift_card (
  IN p card id CHAR(7),
  IN p_user_id INT,
  IN p_amount DECIMAL(10,2),
  OUT p_success BOOLEAN,
  OUT p_message VARCHAR(255)
BEGIN
```

)

```
DECLARE v_status ENUM('active', 'inactive', 'blocked', 'expired');
proc end:Begin
  -- Check if card exists
  IF NOT EXISTS (SELECT 1 FROM gift_cards WHERE card_id = p_card_id) THEN
    SET p success = FALSE;
    SET p message = 'Gift card not found';
    LEAVE proc end;
  END IF;
  SELECT status INTO v_status FROM gift_cards WHERE card_id = p_card_id;
  IF v_status != 'active' THEN
    SET p_success = FALSE;
    SET p_message = CONCAT('Gift card status is ', v_status);
    LEAVE proc_end;
  END IF;
  IF p_amount <= 0 THEN
    SET p success = FALSE;
    SET p message = 'Recharge amount must be positive';
    LEAVE proc_end;
  END IF;
  -- Update balance
  UPDATE gift cards SET current balance = current balance + p amount, updated at = NOW()
  WHERE card_id = p_card_id;
  -- Log transaction
  INSERT INTO gift card transactions(card id, user id, transaction type, amount, notes)
  VALUES (p_card_id, p_user_id, 'recharge', p_amount, 'Recharge');
  SET p_success = TRUE;
  SET p_message = 'Recharge successful';
  End proc_end;
END //
DELIMITER;
                     ■ Automatic expiry Handling
DELIMITER //
CREATE PROCEDURE expire_gift_cards()
BEGIN
  UPDATE gift_cards
  SET status = 'expired', updated at = NOW()
  WHERE expiration_date < CURDATE() AND status = 'active';
END //
DELIMITER;
```

#### ■ Redeem gift card & also Check for Fraud Detection

```
DELIMITER //
CREATE PROCEDURE redeem_gift_card (
  IN p_card_id CHAR(7),
  IN p user id INT,
  IN p amount DECIMAL(10,2),
  OUT p_success BOOLEAN,
  OUT p_message VARCHAR(255)
)
BEGIN
  DECLARE v balance DECIMAL(10,2);
  DECLARE v_status ENUM('active', 'inactive', 'blocked', 'expired');
  DECLARE v_expired BOOL;
  proc end: BEGIN
    -- Card existence check
    IF NOT EXISTS (SELECT 1 FROM gift_cards WHERE card_id = p_card_id) THEN
      SET p_success = FALSE;
      SET p message = 'Gift card not found';
      LEAVE proc end;
    END IF;
    -- Fetch balance, status, and expiry status
    SELECT current_balance, status, (expiration_date < CURDATE())
    INTO v_balance, v_status, v_expired
    FROM gift_cards
    WHERE card_id = p_card_id;
    -- Update status if expired
    IF v_expired AND v_status != 'expired' THEN
      UPDATE gift cards SET status = 'expired' WHERE card id = p card id;
      SET p success = FALSE;
      SET p message = 'Gift card is expired';
      LEAVE proc end;
    END IF;
    -- Check card status
    IF v status != 'active' THEN
      SET p_success = FALSE;
      SET p_message = CONCAT('Gift card status is ', v_status);
      LEAVE proc_end;
    END IF;
    -- Balance check
    IF v balance < p amount THEN
      SET p success = FALSE;
      SET p message = 'Insufficient balance';
      LEAVE proc_end;
    END IF;
```

```
-- Basic fraud detection
    IF p amount > 1000 THEN
      SET p_success = FALSE;
      SET p_message = 'Transaction exceeds allowed limit';
      LEAVE proc_end;
    END IF;
    -- Update balance
    UPDATE gift_cards
    SET current_balance = current_balance - p_amount,
      updated at = NOW()
    WHERE card_id = p_card_id;
    -- Log transaction
    INSERT INTO gift card transactions(card id, user id, transaction type, amount, notes)
    VALUES (p card id, p user id, 'redemption', p amount, 'Redemption');
    SET p_success = TRUE;
    SET p message = 'Redemption successful';
  END proc end;
END //
DELIMITER;
                     ■ Transfer Gift Card
DELIMITER //
CREATE PROCEDURE transfer gift card (
  IN p card id CHAR(7),
  IN p_from_user INT,
  IN p_to_user INT,
  OUT p_success BOOLEAN,
  OUT p_message VARCHAR(255)
)
BEGIN
  DECLARE v_current_user INT;
  DECLARE v status ENUM('active', 'inactive', 'blocked', 'expired');
proc end:Begin
  -- Check if card exists and belongs to from_user
  SELECT user_id, status INTO v_current_user, v_status FROM gift_cards WHERE card_id =
p card id;
  IF v_current_user IS NULL THEN
    SET p_success = FALSE;
    SET p_message = 'Gift card is unassigned and cannot be transferred';
    LEAVE proc_end;
  END IF;
```

```
IF v_current_user != p_from_user THEN
    SET p_success = FALSE;
    SET p message = 'Gift card does not belong to the transferring user';
    LEAVE proc end;
  END IF;
  IF v status != 'active' THEN
    SET p success = FALSE;
    SET p_message = CONCAT('Gift card status is ', v_status);
    LEAVE proc_end;
  END IF;
  -- Transfer card
  UPDATE gift_cards SET user_id = p_to_user, updated_at = NOW() WHERE card_id = p_card_id;
  -- Log transactions: transfer out and transfer in
  INSERT INTO gift card transactions(card id, user id, transaction type, amount, notes)
  VALUES (p_card_id, p_from_user, 'transfer_out', 0, CONCAT('Transferred to user ', p_to_user));
  INSERT INTO gift card transactions(card id, user id, transaction type, amount, notes)
  VALUES (p card id, p to user, 'transfer in', 0, CONCAT('Received from user', p from user'));
  SET p_success = TRUE;
  SET p_message = 'Gift card transferred successfully';
  End proc end;
END //
DELIMITER;
                     ■ Status Management (Active, Expired, Inactive, Blocked)
DELIMITER //
CREATE PROCEDURE update_gift_card_status (
  IN p_card_id CHAR(7),
  IN p_new_status ENUM('active', 'inactive', 'blocked', 'expired'),
  OUT p success BOOLEAN,
  OUT p message VARCHAR(255)
)
BEGIN
proc end:Begin
  IF NOT EXISTS (SELECT 1 FROM gift cards WHERE card id = p card id) THEN
    SET p success = FALSE;
    SET p_message = 'Gift card not found';
    LEAVE proc_end;
  END IF;
  UPDATE gift_cards SET status = p_new_status, updated_at = NOW() WHERE card_id = p_card_id;
```

```
SET p_success = TRUE;
SET p_message = CONCAT('Gift card status updated to ', p_new_status);
End proc_end;
END //
DELIMITER;
```

# ■ Assign Gift Card to User

If we generate Bulk Cards then this procedure will help us to assign one of the card from Bulk Generated cards to the User.

```
DELIMITTER //

CREATE PROCEDURE assign_gift_card_to_user (
   IN p_card_id CHAR(7),
   IN p_user_id INT
)

BEGIN
   UPDATE gift_cards
   SET user_id = p_user_id
   WHERE card_id = p_card_id;

END //

DELIMITER;
```

#### **■** Reporting

#### After Designing our database we will execute querries on it

#### To insert value into database:-

INSERT INTO users (username, email) VALUES ('John', 'John@example.com'), ('Joy', 'Joy@example.com'), ('Raju', 'Raju@example.com'), ('Mahesh', 'Mahesh@example.com');

#### select \* from users;

|   | user_id | username | email              | created_at          |
|---|---------|----------|--------------------|---------------------|
| ١ | 1       | John     | John@example.com   | 2025-06-21 15:12:46 |
|   | 2       | Joy      | Joy@example.com    | 2025-06-21 15:12:46 |
|   | 3       | Raju     | Raju@example.com   | 2025-06-21 18:46:08 |
|   | 4       | Mahesh   | Mahesh@example.com | 2025-06-21 18:46:08 |

#### To generate a single gift card for specific user\_id:-

call generate gift card(100.00, CURDATE() + INTERVAL 30 DAY, 1, @card id);

|   | card_id | initial_balance | current_balance | expiration_date | status | user_id | created_at          | updated_at          |
|---|---------|-----------------|-----------------|-----------------|--------|---------|---------------------|---------------------|
| • | 60cfca3 | 100.00          | 100.00          | 2025-07-22      | active | 1       | 2025-06-22 16:13:54 | 2025-06-22 16:13:54 |

#### To generate a bulk card without assign to a user id:-

call bulk\_generate\_gift\_cards(4, 100.00, DATE\_ADD(CURDATE(), INTERVAL 30 DAY), NULL):

| 110 | ,       |                 |                 |                 |          |         |                     |                     |
|-----|---------|-----------------|-----------------|-----------------|----------|---------|---------------------|---------------------|
|     | card_id | initial_balance | current_balance | expiration_date | status   | user_id | created_at          | updated_at          |
| •   | 3060185 | 100.00          | 100.00          | 2025-07-22      | inactive | HULL    | 2025-06-22 16:15:31 | 2025-06-22 16:15:31 |
|     | 94b1c9e | 100.00          | 100.00          | 2025-07-22      | IIIacuve | NULL    | 2025-06-22 16:15:31 | 2025-06-22 16:15:31 |
|     | d9a9892 | 100.00          | 100.00          | 2025-07-22      | inactive |         | 2025-06-22 16:15:31 | 2025-06-22 16:15:31 |
|     | e428b82 | 100.00          | 100.00          | 2025-07-22      | inactive | NULL    | 2025-06-22 16:15:31 | 2025-06-22 16:15:31 |

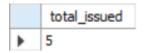
#### To assign a specific card id to a user id:-

call assign gift card to user('3060185', 2);-- This querry is applied for user id 2

|   | card_id | initial_balance | current_balance | expiration_date | status   | user_id | created_at          | updated_at          |
|---|---------|-----------------|-----------------|-----------------|----------|---------|---------------------|---------------------|
| • | 3060185 | 100.00          | 100.00          | 2025-07-22      | inactive | 2       | 2025-06-22 16:15:31 | 2025-06-22 16:22:39 |
|   | 60cfca3 | 100.00          | 100.00          | 2025-07-22      | active   | 1       | 2025-06-22 16:13:54 | 2025-06-22 16:13:54 |

#### To check total issued-cards:-

select COUNT(\*) AS total issued FROM gift cards;



#### To redeem card:-

call redeem\_gift\_card('60cfca3',1,10,@success,@msg); -- this querry is applied for user id 1

|   | card_id | initial_balance | current_balance | expiration_date | status   | user_id | created_at          | updated_at          |
|---|---------|-----------------|-----------------|-----------------|----------|---------|---------------------|---------------------|
| • | 3060185 | 100.00          | 100.00          | 2025-07-22      | inactive | 2       | 2025-06-22 16:15:31 | 2025-06-22 16:22:39 |
|   | 60cfca3 | 100.00          | 90.00           | 2025-07-22      | active   | 1       | 2025-06-22 16:13:54 | 2025-06-22 16:23:59 |

#### To check how many cards are generated and how many cards are assign to the user:-

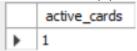
-- First row is NULL of user\_id because we generated a bulk cards without assign any user\_id to it. The below screenshot means we have generated total 5 cards 2 cards assigned to the specific user id and 3 remaining to assign.

select user id, COUNT(\*) AS cards count FROM gift cards GROUP BY user id;

|   | user_id | cards_count |
|---|---------|-------------|
| • | NULL    | 3           |
|   | 1       | 1           |
|   | 2       | 1           |

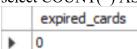
#### To check number of active cards:

select COUNT(\*) AS active cards FROM gift cards WHERE status = 'active';



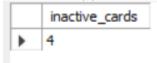
#### To check expired cards:-

select COUNT(\*) AS expired\_cards FROM gift\_cards WHERE status = 'expired';



#### To check inactive cards:-

select count(\*) as inactive cards from gift cards where status = 'inactive';



#### To transfer one card id to another user id:

call transfer\_gift\_card('60cfca3', 1, 3, @success, @msg);-- Here card of user\_id 1 is transfer to user\_id 3

|   | card_id | initial_balance | current_balance | expiration_date | status   | user_id | created_at          | updated_at          |
|---|---------|-----------------|-----------------|-----------------|----------|---------|---------------------|---------------------|
| • | 60cfca3 | 100.00          | 90.00           | 2025-07-22      | active   | 3       | 2025-06-22 16:13:54 | 2025-06-22 16:28:39 |
|   | 3060185 | 100.00          | 100.00          | 2025-07-22      | inactive | 2       | 2025-06-22 16:15:31 | 2025-06-22 16:22:39 |

#### To recharge gift card:

call recharge\_gift\_card('60cfca3', 3, 100.00, @success, @message);

|   |   | card_id | initial_balance | current_balance | expiration_date | status   | user_id | created_at          | updated_at          |
|---|---|---------|-----------------|-----------------|-----------------|----------|---------|---------------------|---------------------|
|   | • | 60cfca3 | 100.00          | 190.00          | 2025-07-22      | active   | 3       | 2025-06-22 16:13:54 | 2025-06-22 16:30:49 |
| ı |   | 3060185 | 100.00          | 100.00          | 2025-07-22      | inactive | 2       | 2025-06-22 16:15:31 | 2025-06-22 16:22:39 |

#### To update status of gift card(blocked,inactive,active,expired):

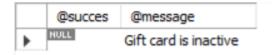
call update gift card status('3060185','active',@success,@msg);

|   | card_id | initial_balance | current_balance | expiration_date | status | user_id | created_at          | updated_at          |
|---|---------|-----------------|-----------------|-----------------|--------|---------|---------------------|---------------------|
| ) | 60cfca3 | 100.00          | 190.00          | 2025-07-22      | active | 3       | 2025-06-22 16:13:54 | 2025-06-22 16:32:42 |
|   | 3060185 | 100.00          | 100.00          | 2025-07-22      | active | 2       | 2025-06-22 16:15:31 | 2025-06-22 16:33:05 |

#### To recharge card like block, inactive, expired:

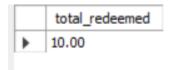
-- If we try to recharge card like (blocked, expired, inactive) then it will not work it will give message like. Here first i change status to inactive then i run this querry.

call recharge\_gift\_card('3060185', 2, 100.00, @success, @message); select @succes,@message; -- After running this it will show message.



#### To check total redeem:

select IFNULL(SUM(amount),0) AS total\_redeemed FROM gift\_card\_transactions WHERE transaction type = 'redemption';



#### To check current\_balance:

select \* from gift cards where current balance > 100;

|   | card_id | initial_balance | current_balance | expiration_date | status | user_id | created_at          | updated_at          |
|---|---------|-----------------|-----------------|-----------------|--------|---------|---------------------|---------------------|
| • | 60cfca3 | 100.00          | 190.00          | 2025-07-22      | active | 3       | 2025-06-22 16:13:54 | 2025-06-22 16:32:42 |
|   | HULL    | NULL            | NULL            | NULL            | NULL   | NULL    | NULL                | HULL                |

select \* from gift\_cards where current\_balance = 100;

|   |         |                 |                 |                 |          |         |                     | _                   |
|---|---------|-----------------|-----------------|-----------------|----------|---------|---------------------|---------------------|
|   | card_id | initial_balance | current_balance | expiration_date | status   | user_id | created_at          | updated_at          |
| • | 3060185 | 100.00          | 100.00          | 2025-07-22      | inactive | 2       | 2025-06-22 16:15:31 | 2025-06-22 16:37:48 |
|   | 94b1c9e | 100.00          | 100.00          | 2025-07-22      | inactive | NULL    | 2025-06-22 16:15:31 | 2025-06-22 16:15:31 |
|   | d9a9892 | 100.00          | 100.00          | 2025-07-22      | inactive | NULL    | 2025-06-22 16:15:31 | 2025-06-22 16:15:31 |
|   | e428b82 | 100.00          | 100.00          | 2025-07-22      | inactive | NULL    | 2025-06-22 16:15:31 | 2025-06-22 16:15:31 |
|   | NULL    | NULL            | NULL            | NULL            | NULL     | NULL    | NULL                | NULL                |

To check gift\_card\_transactions:select \* from gift\_card\_transactions;

|   | transaction_id | card_id | user_id | transaction_type | amount | transaction_date    | notes                 |
|---|----------------|---------|---------|------------------|--------|---------------------|-----------------------|
| • | 1              | 60cfca3 | 1       | redemption       | 10.00  | 2025-06-22 16:23:59 | Redemption            |
|   | 2              | 60cfca3 | 1       | transfer_out     | 0.00   | 2025-06-22 16:28:39 | Transferred to user 3 |
|   | 3              | 60cfca3 | 3       | transfer_in      | 0.00   | 2025-06-22 16:28:39 | Received from user 1  |
|   | 4              | 60cfca3 | 3       | recharge         | 100.00 | 2025-06-22 16:30:49 | Recharge              |
|   | NULL           | NULL    | NULL    | NULL             | NULL   | NULL                | NULL                  |