Database Queries to handle coins and subscriptions

In the coin_vault table, directly modifying the coin_balance using manual queries will update the balance for a given user. However, this change alone does not allow the user to create Treels, as the coin_vault, subscription, and payment tables are interlinked. The is_subscription_active flag is derived by validating whether the user's subscription is still active or expired. This is determined by comparing the payment_date with the user's chosen subscription plan and calculating the remaining validity period. Therefore, to properly activate a user and enable Treel creation, it is necessary to update not only the coin_balance but also the corresponding payment_date and subscription details. This ensures that the subscription status reflects an active state and aligns with the system's business logic.

Query to get user id:

```
select * from app_user where email_id='example@email.com'
```

Query to check the coin balance of a user:

```
select * from coin_vault where app_user_id=123
```

Query to add the coins to the coin_vault:

```
UPDATE coin_vault

SET coin_balance = 500

WHERE app_user_id = 123;
```

Query to check whether the user subscription active or not:

```
WITH coin_balance AS ( -- coin balance has to be > 0

SELECT app_user_id, coin_balance

FROM public.coin_vault

WHERE app_user_id = 123
),

latest_payment AS ( -- Check latest payment to make sure the subscription is active

SELECT DISTINCT ON (sp.user_subscription_id)

sp.user_subscription_id,
```

```
sp.payment_date
   FROM public.subscription_payment sp
   WHERE sp.status = 'PAID'
   ORDER BY sp.user subscription id, sp.payment date DESC
 ),
 series_counts AS ( -- Check if any series limits for the subscribed plan
   SELECT
     nsr.app_user_id,
     sp.user_subscription_id,
     -- Series created today
     COUNT(*) FILTER (WHERE DATE(nsr.created_dttm) = CURRENT_DATE) AS
series created today,
     -- Series created in the last recurring billing day (monthly/yearly)
     COUNT(*) FILTER (
     WHERE nsr.created_dttm >=
      CASE
      WHEN us.billing_cycle = 'MONTHLY' THEN sp.payment_date
       WHEN us.billing cycle = 'YEARLY' THEN
        sp.payment_date
        + INTERVAL '1 month' * FLOOR(
          EXTRACT(YEAR FROM AGE(CURRENT_DATE, sp.payment_date)) * 12
          + EXTRACT(MONTH FROM AGE(CURRENT_DATE, sp.payment_date))
```

```
ELSE CURRENT DATE - INTERVAL '1 month' -- fallback
       END
     AND nsr.created_dttm < CURRENT_DATE
     ) AS series created this month,
     -- Series created in the 1-year window since payment
     COUNT(*) FILTER (
      WHERE nsr.created dttm >= sp.payment date AND nsr.created dttm <
sp.payment date + INTERVAL '1 year'
     ) AS series_created_this_year
   FROM public.new_series_request nsr
   JOIN public.user_subscription us ON nsr.app_user_id = us.app_user_id
   JOIN latest_payment sp ON sp.user_subscription_id = us.user_subscription_id
   WHERE nsr.requested_dttm >= sp.payment_date
   AND nsr.app user id = 123
   GROUP BY nsr.app_user_id, sp.user_subscription_id, us.billing_cycle,
sp.payment_date
 SELECT
   us.user_subscription_id,
   us.app_user_id,
   COALESCE(cb.coin_balance, 0) AS coin_balance,
   -- Subscription Type Logic
   CASE
     WHEN us.coin count > 0
```

```
AND COALESCE(us.daily new series limit, 0) = 0
       AND COALESCE(us.monthly_new_series_limit, 0) = 0
       AND COALESCE(us.yearly_new_series_limit, 0) = 0
       AND us.billing cycle = 'MONTHLY' THEN 'MONTHLY COIN LIMIT'
     WHEN us.coin count > 0
      AND COALESCE(us.daily_new_series_limit, 0) = 0
       AND COALESCE(us.monthly_new_series_limit, 0) = 0
       AND COALESCE(us.yearly new series limit, 0) = 0
       AND us.billing_cycle = 'YEARLY' THEN 'YEARLY_COIN_LIMIT'
     WHEN COALESCE(us.daily new series limit, 0) > 0
       OR COALESCE(us.monthly_new_series_limit, 0) > 0
       OR COALESCE(us.yearly_new_series_limit, 0) > 0 THEN 'TREEL_LIMIT'
     ELSE 'FREE'
   END AS subscription type,
   lp.payment_date,
   -- Active subscription logic
   CASE
     WHEN us.billing_cycle = 'MONTHLY' AND lp.payment_date >= CURRENT_DATE -
INTERVAL '1 month' THEN TRUE
     WHEN us.billing_cycle = 'YEARLY' AND lp.payment_date >= CURRENT_DATE -
INTERVAL '1 year' THEN TRUE
     ELSE FALSE
   END AS is_subscription_active,
   us.daily_new_series_limit,
```

```
us.monthly_new_series_limit,
   us.yearly_new_series_limit,
   -- Series stats
   COALESCE(sc.series_created_today, 0) AS series_created_today,
   COALESCE(sc.series_created_this_month, 0) AS series_created_this_month,
   COALESCE(sc.series_created_this_year, 0) AS series_created_this_year
 FROM public.user_subscription us
 LEFT JOIN latest_payment lp ON lp.user_subscription_id = us.user_subscription_id
 LEFT JOIN series counts sc ON sc.user subscription id = us.user subscription id
 LEFT JOIN coin_balance cb ON cb.app_user_id = us.app_user_id
 WHERE us.is active = TRUE
 AND us.payment_status = 'PAID'
 AND COALESCE(us.coin count, 0) > 0
 AND CURRENT_DATE BETWEEN us.start_date AND COALESCE(us.end_date,
CURRENT DATE)
 AND us.app_user_id = 123;
Query to make the subscription active and change payment date to current date:
UPDATE public.subscription_payment
SET status = 'PAID',
 payment_date = CURRENT_DATE
WHERE user_subscription_id = (
 SELECT user_subscription_id
 FROM public.user subscription
 WHERE app_user_id = 123
);
```

Curls used to activate the channel and subscription of user through backend

1) Run this curl first (change the app user id and date to the current date)

```
curl --location 'http://localhost:8080/api/v1/razorpay/user-subscription/add' \
--header 'Content-Type: application/json' \
--data '{
 "appUserId": 123,
 "billingCycle": "YEARLY",
  "subscriptionPlanId": 10,
 "coinCount": 20000,
  "subscriptionPrice": 2999,
  "paymentStatus": "PENDING",
 "dailyNewSeriesLimit": 0,
  "monthlyNewSeriesLimit": 0,
  "yearlyNewSeriesLimit": 0,
 "isActive": true,
 "startDate": "2025-09-10",
  "razorpayCustomerUid": "cust_Qwsv3vXncGD38N",
 "razorpaySubscriptionId": "sub_Qwsv66wv4KkFbu"
```

2) Copy the usersubscriptionId from the response by running the first curl and paste it in the second curl given below

}'

```
curl --location 'http://localhost:8080/api/v1/razorpay/subscription-payment/add' \
--header 'Content-Type: application/json' \
--data '{
    "amount": 2999,
    "createdUser": "system",
    "currency": "INR",
```

```
"paidAt": "2025-09-09T10:10:41.1592887",
"paymentGateway": "RAZORPAY",
"razorpayPaymentId": "string",
"receipt": "sub_Qwm34HhrOtQubG",
"status": "PAID",
"userSubscriptionId": 123
}
```