Razorpay Payment & Refund Flow - Complete Guide

1. Payment Flow

The Razorpay payment process involves multiple steps to ensure secure and reliable transaction handling:

1. **Step 1:** User initiates a payment on the website/app.
2. **Step 2:** Frontend requests a payment order from the backend.
3. **Step 3:** Backend uses Razorpay API (with Secret Key) to create an **Order ID**.
4. **Step 4:** Frontend loads Razorpay Checkout with the Order ID and Key ID.
5. **Step 5:** User completes payment via card/UPI/netbanking/wallets.
6. **Step 6:** Razorpay verifies payment and sends callback (signature verification required).
7. **Step 7:** Razorpay settles money to the merchant's Razorpay account (escrow).

2. Refund Flow

Refunds are processed by the merchant via Razorpay APIs. The money is returned to the user's original payment method.

1. **Step 1:** Merchant identifies a transaction to refund.
2. **Step 2:** Merchant calls Razorpay Refund API with **Payment ID** and amount.
3. **Step 3:** Razorpay checks balance in merchant's account or withholds settlement.
4. **Step 4:** Razorpay sends refund request to banks/card networks/UPI.
5. **Step 5:** User receives refund in original payment method (timeline: 5–7 working days depending on bank/UPI/card).

3. Refund Timelines

- **UPI Refunds:** Usually instant, maximum 24 hours.
- **Wallet Refunds:** Instant.
- **Debit/Credit Card Refunds:** 3–5 working days.
- **Netbanking Refunds:** 5–7 working days.

4. Refund API Example (Node.js)

```
const Razorpay = require("razorpay");

const instance = new Razorpay({
  key_id: "YOUR_KEY_ID",
  key_secret: "YOUR_SECRET_KEY"
});

// Refund API
instance.payments.refund("pay_ID_here", {
  amount: 5000 // Refund Rs.50 (amount in paise)
}).then((response) => {
  console.log("Refund Success:", response);
}).catch((err) => {
  console.error("Refund Failed:", err);
});
```

5. Real-Life Example

- A user buys shoes worth Rs. 2000.
- Merchant calls Razorpay refund API to return Rs. 500 for size issue.
- Razorpay deducts Rs. 500 from merchant's balance/escrow.
- Refund request sent to bank.
- User receives Rs. 500 back in 3–5 days (if card) or instantly (if UPI).