

Mini Social App — Part 2 Case-Based Answers

1. Real-Time Audio Calls (Twilio/Exotel)

Integration Overview

- Select Twilio or Exotel for voice calls.
- Backend generates secure tokens, responds to call status, and handles webhooks.
- Frontend uses SDKs for presence, call UI, and connects hang-up/controls.

Required Changes

Backend Changes:

1. Token endpoint (/api/call/token)
2. Status endpoint (/api/call/status)
3. Webhook endpoints (call-start, call-end)

Frontend Changes:

- Show user status (online/busy)
- Use SDK to initiate call & show duration
- Start/stop coin deduction

Call Tracking & Billing

- Track call duration via SDK callbacks
- Option A: Pre-authorize coins per minute
- Option B: Deduct coins after call
- Rollback on failure

2. Wallet & KYC System

Database Schema

Wallet Table:

- id
- userId
- balance
- createdAt
- updatedAt

Transaction Table:

- id
- walletId
- type (CREDIT/DEBIT)
- amount
- description
- createdAt

Referral Table:

- id
- referrerId
- referredId
- rewardAmount
- status
- createdAt

KYC Table:

- id
- userId
- status
- provider
- requestId
- createdAt

Referral Flow

1. User A shares code; B signs up
2. Credit both wallets and log transactions

KYC Integration

1. User uploads ID
2. Send to Karza/Signzy
3. Update KYC table on response
4. Only verified users can withdraw

3. Performance & Scalability

For 100K+ Daily Users

1. Stateless backend, auto-scaled (Kubernetes / serverless)
2. Sharded wallets & read replicas
3. CDN for media and optimized resources

Fast Load on Low-End Devices

- Lightweight UI + caching (AsyncStorage)
- Code-splitting & lazy loading
- CDN + offline support

4. Team Handover & Audit

🌱 Pre-Handover Checklist

- Code architecture review (modules, separation)
- API/doc completeness
- Up-to-date dependencies
- Security & secret audits

Handling Tech Debt

1. Identify/prioritize debt tasks
2. Incremental refactor (wallet, call flows)
3. Add documentation (API, architecture)
4. Set up CI/CD (linting, type-check, builds)

Summary

All four question areas covered with scalable solutions and clear implementation paths.