🂡 Chkoba Mobile Game — Complete Build Plan (2–4 Players)

A modern **mobile multiplayer implementation of the Tunisian card game Chkoba (شكوبة)**, built with clean architecture, free deployment, Arabic & English support, and optimized to play privately between loved ones.

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1. 🎯 Game Description

Chkoba Mobile is a private, real-time multiplayer card game for **2 or 4 players**.

Match Modes

- **2 Players** → Each player plays **solo**
- **4 Players** → Players play in **teams of 2** (Team A vs Team B)

Room Creation Logic

- One player is the **Host**
- Host creates a room and chooses:
- ✅ Target score: **11 or 21**
- ✅ Players mode: **2 players** or **4 players**
- Host can invite:
- **1 player** (for 2-player match)
- **3 players** (for 4-player team match)

The game starts automatically once all invited players join.

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2. 🃏 Core Game Rules (Tunisian Chkoba)

Deck

- Default: **40-card deck** (Ace–7 + face cards)
- Optional future support: 52-card deck

Card Values (Tunisian Variant)

- Ace = 1
- 2–7 = face value
- Princess (Queen) = 8
- Prince (Jack) = 9
- King = 10

Dealing Rules

- Each player receives **3 cards**
- **4 cards** are placed on the table
- Cards are dealt in rounds until deck is finished

Capturing Rules

- A player captures cards if:
- Played card equals value of a table card
- OR sum of multiple table cards equals played card
- Captured cards go into the **player or team pile**

Chkoba

- If a player clears the table completely → **Chkoba bonus (+1)**

Scoring (End of Hand)

- Most cards captured
- Most coins (diamonds)
- 7 of diamonds (7-livra)
- Chkoba bonuses

Match End

- First player/team to reach **11 or 21 points wins** (chosen by host)

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3. 🎮App Features

Multiplayer

- Real-time sync
- Turn-based logic
- Private rooms (invite-only)

UI & UX

- Drag & drop cards
- Smooth dealing & capture animations
- Turn indicator & score tracker

Themes

- 🔴**Red Theme** (classic, romantic)
- ⚪**White Theme** (clean, minimal)

Languages

- 🈲**Arabic** (RTL supported)
- 🪨 **English**

Language switching at runtime.

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4. 🎞️Architecture Overview

Frontend (Mobile)

- **Flutter** (no Flame)
- Material 3
- Animations via Flutter widgets
- State management: **Riverpod**

Backend (Free Tier)

- **Supabase**
- Auth (anonymous / magic link)
- PostgreSQL database
- Realtime (rooms & turns)
- Edge Functions (game validation)

Why Supabase

✅Free tier enough for private matches ✅Realtime channels ✅Built-in auth ✅Easy mobile SDK

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5.   Project Structure

```
lib/
├─ core/
│    ├─ rules/
│    ├─ game_engine/
│    └─ models/
│
├─ features/
│    ├─ lobby/
│    ├─ room/
│    ├─ game/
│    └─ score/
│
├─ ui/
│    ├─ themes/
```

```
    |      ├── widgets/
    |      └── animations/
    |
    ├── l10n/
    |      ├── ar.json
    |      └── en.json
    |
    └── main.dart
```

Backend:

```
supabase/
├── functions/
│      └── validate_move.ts
├── migrations/
└── policies/
```

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6.   Game Engine Design

Responsibilities

- • Validate legal moves
- • Manage turns
- • Compute captures
- • Handle scoring
- • Support 2 & 4 players

Configuration Object

```
GameConfig(
  playersCount: 2 or 4,
  targetScore: 11 or 21,
  teamsEnabled: true/false,
)
```

The engine is **UI-independent** and fully testable.

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7. 🎋Security & Fair Play

- • Moves validated server-side (Edge Functions)
- • Host permissions limited after game start

• Realtime sync protected by RLS

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8. 🖌️ Deployment (100% Free)

Mobile

- Android APK
- iOS (TestFlight)

Backend

- Supabase Free Tier

9.　Step-by-Step Build Plan

Phase 1 — Design

- Finalize rules & variants
- UI wireframes
- Theme colors

Phase 2 — Core Engine

- Cards & deck logic
- Capture algorithms
- Scoring system

Phase 3 — Multiplayer

- Room creation
- Invite system
- Realtime turns

Phase 4 — UI & Animations

- Card animations
- Theme switcher
- Arabic RTL support

Phase 5 — Testing

- Engine unit tests
- Multiplayer edge cases

Phase 6 — Deploy

   • Supabase setup
   • Build APK
   • Share with Chayma ❤️

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10.   Vision

This project is built not just as a game, but as a **private shared experience** — something simple, elegant, and personal, made to enjoy time together.

A small table. Two hearts. One deck.