APP Music

🎬 MOVIE APP – MASTER PROJECT PLAN (V2.0)

📌 1. PROJECT OVERVIEW

- **Goal:** Xây dựng Movie App chuẩn Production-ready (Auth, API, Cloud DB).
- **Tech Stack:** Kotlin, Jetpack Compose, Supabase (Auth + DB), TMDb API, Hilt, Retrofit, Coil, Room (Cache), Paging 3.
- **Architecture:** Clean Architecture + MVVM.

🏗️ 2. ARCHITECTURE & DATA FLOW

🧱 Pattern Layers:

1. **Presentation:** UI (Compose) + ViewModel (State Management).
2. **Domain:** UseCases (Business Logic) + Repository Interfaces.
3. **Data:** Repository Impl + Remote (Retrofit) + Local (Room).

📂 Folder Structure:

Plaintext

```
app/
├── di/               # Hilt Modules
├── data/
│     ├── remote/       # Retrofit API, DTOs
│     ├── local/        # Room DB, DAOs
│     └── repository/   # Repository Implementations
├── domain/
│     ├── model/        # Domain Models (POJO)
│     ├── usecase/      # Business Logic
│     └── repository/   # Interfaces
├── presentation/
│     ├── auth/         # Login, Register
│     ├── home/         # Trending, Movie List
│     ├── detail/       # Movie Details
```

```
|          └── common/        # Components (Shimmer, Loading)
└── core/                     # Constants, Utils, Theme
```

🔐 3. CORE SYSTEMS

🔑 Auth System (Supabase)

- **Features:** Email/Password, Auto-session, Profile Management.

- **Flow:** Splash → Check Session → (Home / Login).

🗄 Favorite & Database

- **TMDb:** Fetch data (Trending, Search).

- **Supabase DB:** Lưu `favorites` (Sync online).

- **Room:** Cache dữ liệu offline để trải nghiệm mượt mà hơn.

🎨 4. UI/UX REQUIREMENTS

- **Screens:** Splash, Login, Register, Home, Detail, Search, Favorite.

- **UX Plus:** * Shimmer Loading (thay cho ProgressBar).

  - ☐ Shared Element Transition (ảnh "bay" từ Home sang Detail).

  - ☐ Dark Mode support.

  - ☐ Error handling (Empty state, No Internet).

📈 5. DEVELOPMENT ROADMAP (14 DAYS)

📅 Week 1: Foundation & Core UI

- ☐ **Day 1-2:** Setup Project, Hilt, Navigation, Folder Structure.

- ☐ **Day 3-4:** Home Screen: Implement Retrofit + Movie List + Shimmer.

- ☐ **Day 5:** Detail Screen: UI layout + Youtube Player (Trailer).

- ☐ **Day 6:** Search Feature: Debounce search + API Integration.

- ☐ **Day 7:** Refactor & Clean Code: Tách logic sang UseCases.

📅 Week 2: Advanced Features & Polish

- [ ] **Day 8-9:** Supabase Auth: Login/Register + Profile UI.

- [ ] **Day 10:** Favorite System: Real-time sync với Supabase.

- [ ] **Day 11:** Room Database: Implement Offline Cache (Source of Truth).

- [ ] **Day 12:** Paging 3: Xử lý danh sách phim dài vô tận.

- [ ] **Day 13:** UI Polish: Animation, Dark mode, Edge-to-edge.

- [ ] **Day 14:** Final Touch: Viết README, chụp ảnh Portfolio, Deploy.

💼 6. PORTFOLIO CHECKLIST

- [ ] Github Repo với README chuyên nghiệp.

- [ ] Video Demo (quay màn hình điện thoại).

- [ ] Sơ đồ Architecture (mình có thể hỗ trợ vẽ bằng Mermaid).

- [ ] Giải thích cách xử lý Security (RLS) trên Supabase.