

Hugo Radiawan

Mondooli Premium Experience

Flutter · Melos · Modular Clean Architecture

- Purpose-built to transform Mondooli designs into a scalable premium upsell journey
- Built end-to-end across app , core , shared , features/premium
- Target: hiring panel demo highlighting craft, velocity, and collaborative impact

ENGINEER CASE STUDY 2025 · CONFIDENTIAL — DO NOT DISTRIBUTE

Case Overview & Guardrails

- Mission: replicate the Mondooli premium experience from the official design pack using Flutter, clean architecture, and Melos packages.
- Non-negotiables:
 - Respect Figtree typography, Primary Blue `#1D4ED8`, Dark Text `#1A233C`, and premium gradients.
 - Keep layouts responsive and components reusable across `app`, `core`, `shared`, `premium`.
 - Fetch country data dynamically from <https://restcountries.com/v3.1/all>; no hardcoded lists.
- Confidentiality: assets and code stay within the hiring panel. Please do not forward, post, or demo externally without Mondooli approval.
- Timeline guidance: default 3-day window, but communicate if more time is needed to deliver higher quality.

Objective & Role

- **Mission:** reproduce Mondooli's premium journey end-to-end while keeping the codebase clean, typed, and scalable.
- **My Ownership:** workspace bootstrap, theming, routing, premium feature implementation, QA/dev handoff notes.
- **Success Criteria**
 - **Token fidelity:** Primary Blue `#1D4ED8`, Dark Text `#1A233C`, and Figtree typography applied consistently.
 - Responsive + reusable components so every screen holds up on multiple device widths.
 - Dynamic country field powered by <https://restcountries.com/v3.1/all> through `CountryRemoteDataSourceImpl`.
 - Clean architecture boundaries with typed GoRouter routes and testable cubits for each feature slice.

Design Tokens & Reference Assets

- Primary Blue #1D4ED8 drives CTA, nav, and highlight tiles
(`core/lib/src/theme/app_colors.dart`).
- Primary Dark Text #1A233C anchors typography; implemented via
`LightColors.textPrimary` .
- Typography: Google-hosted Figtree (weights 300–900) registered under
`app/assets/fonts/Figtree` .
- Icons: Phosphor icon set mirrors Mondooli glyph system; 3D embellishments aligned with “Thiings” pack from design brief.
- Spacing/Elevation: reusable padding constants + `HighlightTileTheme` ensure consistent card radii and shadows.

Hiring Panel Snapshot

Core Requirements

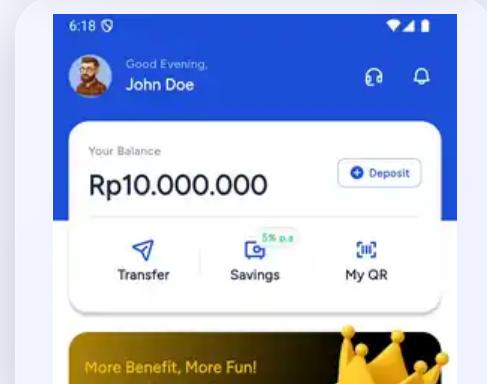
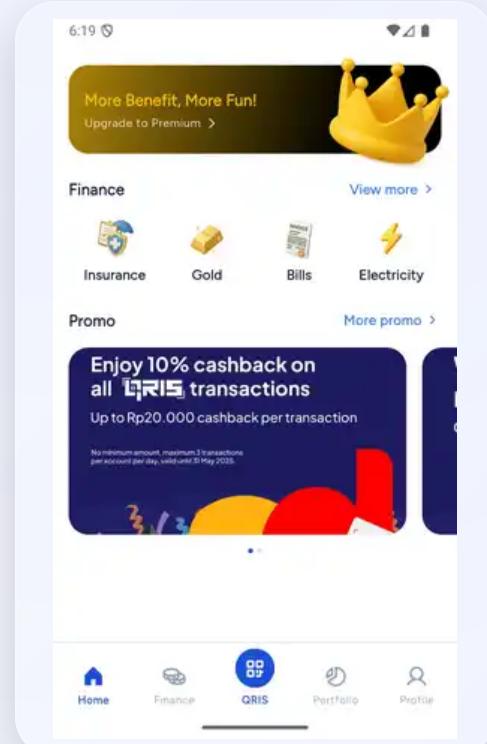
- Pixel-perfect UI + animations (`PremiumBridgePage` gradients, hero crown)
- Clean Architecture boundaries (presentation/domain/data per feature)
- Robust navigation (typed `GoRouter`, bottom nav cubit)
- API readiness with dio + repository abstractions

Impact Signals

- 📦 4-package Melos workspace wired in 48h
- 🔎 Shared UI kit (`shared/lib/src/ui`) eliminates duplicate widgets
- 🚀 Premium flow instrumented for experimentation hooks
- 💚 Core module seeds bloc-based QA test harness

Screen Gallery · Home Experience

- `HomePage` blends GreetingHeader, BalanceCard, PromoCarousel, and Quick Actions.
- `TabsEnum` + `AppBottomNavBarCubit` manage five-tab navigation with QRIS center dock.
- Promo banner “More Benefit, More Fun” drives users to the premium bridge per brief.



Modular Architecture (`app/lib/main.dart`)

- App shell boots `Core.initialize()` then composes `MaterialApp.router`
- Core module (`core/lib/src`)
 - `AppTheme.light`, `HighlightTile` extensions, typography bootstrap (`AppTypography.init()`)
 - `HttpCubit` + `SharedPreferencesService` injected via `MultiBlocProvider`
- Shared UI (`shared/lib/src/ui`): `FloatingBackButton`, `CountrySelector`, `QuickActionButton`
- Feature slices like `premium` expose typed routes, cubits, repositories
- Melos resolution: workspace keeps dependency graph consistent for all packages

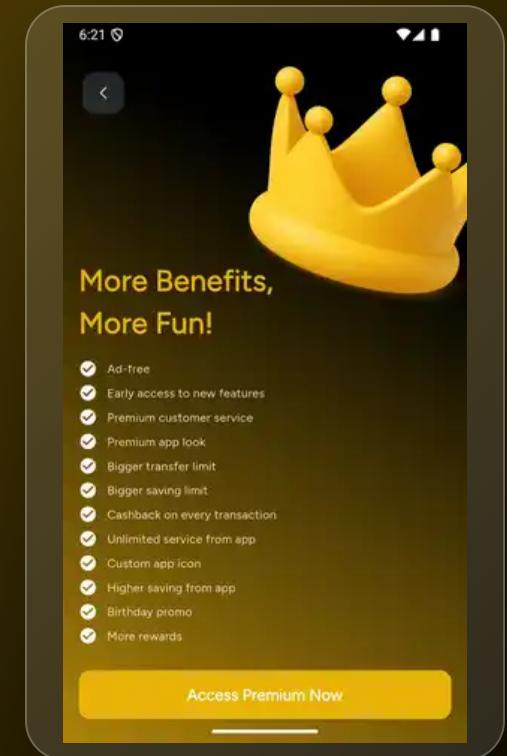
Premium Upgrade Experience · Part 1

1. Premium Bridge (`premium_bridge.page.dart`)

Gradient hero, animated crown asset, conversion CTA wired to `RegistrationRoute`.

2. Registration (`registration.page.dart`)

Form fields, password checklist, `CountrySelector` backed by remote/local data sources.



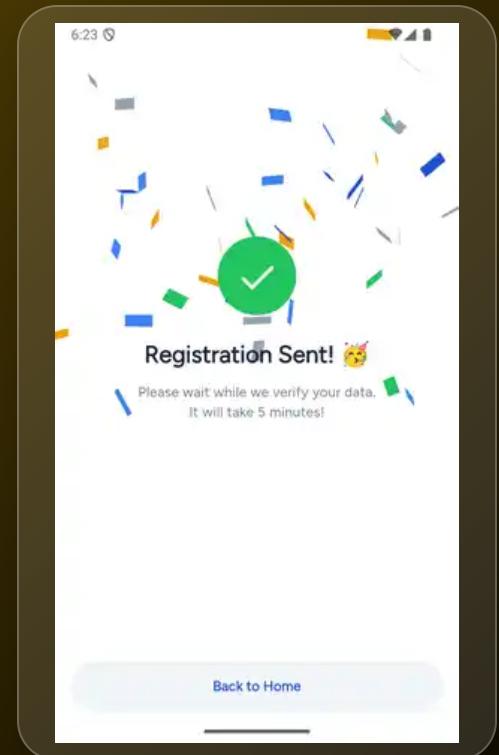
Premium Upgrade Experience · Part 2

3. Success (`success.page.dart`)

Feedback loop, CTA back to home, reuses shared Phosphor icons.

4. Routing (`premium.route.dart`)

`TypedGoRoute` with multi-provider injection ensures testable cubits.



Design System & Tech Stack · Part 1

- Colors + gradients centralized in `LightColors` ; premium + base palettes toggled via `AppTheme`
- **Light/Dark Mode**: runtime theme toggle via `ThemeCubit` ; persisted to `SharedPreferences` for session continuity
- Typography: bundled Figtree font files (`app/assets/fonts/Figtree`) + GoogleFonts fallback
- State management: `flutter_bloc` cubits for nav + network (`AppBottomNavBarCubit` , `HttpCubit`)
- **Barrel files** pattern (`core.dart` , `shared.dart` , `network.dart`) improves module encapsulation and simplifies imports across packages

Design System & Tech Stack · Part 2

- Linting: repo-level `analysis_options.yaml` cranks Flutter lints to production-ready strictness (e.g., `always_specify_types`, `unused_import` as errors) to lock in code quality.
- Tooling: `melos`, `build_runner`, `freezed`, `json_serializable`, `go_router_builder`, all behind `fvm` so every script pins the same Flutter version.
- Platform targets: Android + iOS (Gradle, Xcode configs already in repo)

API & Data Flow

- Country dropdown hits `https://restcountries.com/v3.1/all` via `CountryRemoteDataSourceImpl` (Dio client, 30s timeout).
- Responses cached locally through `CountryLocalDataSourceImpl` + `SharedPreferencesService` for offline resilience.
- Registration cubit consumes normalized `CountryModel` entities, keeping presentation layer decoupled from API schema.
- Error handling: network faults surface inline helper text, while analytics event logs feed future experimentation.

Roadmap & Hiring CTA

- Productize placeholder tabs (Finance, QRIS, Portfolio, Profile) with dedicated feature packages
- Wire `CountryRemoteDataSourceImpl` to live APIs + caching strategy
- Layer analytics + experimentation on `PremiumBridgePage` CTA
- Extend premium model for tiering & pricing experiments
(`features/premium/lib/model.dart`)

I'm ready to join the Mondooli team

1. Walk you through the repo live & answer architecture questions
2. Pair on a new feature (e.g., Finance tab) within the existing workspace
3. Ship a pilot build via CI/CD once access is granted

👉 Let's schedule the technical interview and move this into production.

Submission Package & Runbook

- **Repository:** [Source Code \(Google Drive\)](#)
- **APK Download:** [APK File \(Google Drive\)](#)
- **Prototype placeholder:** *Embed Figma/Loom link here once recording is ready.*
- **APK Size:** ~51 MB raw APK; estimated ~20 MB on Google Play (AAB + delivery optimization) and ~40 MB on App Store.
- **Run locally**
 - i. `fvm use`
 - ii. `melos bootstrap`
 - iii. `melos run app` (Android or iOS — portrait only)
 - iv. `melos run build:apk` (to build APK)
- **Credentials/Notes:** none required; API is public. Update `.env` only if new services are added.
- **Submit to:** `novistya.rahmawati@mondooli.com` with deck + repo link per brief

Confidentiality Reminder

- This deck, source code, and any prototype links are **Engineer Case Study 2025** materials.
- Share only with Mondooli's hiring panel; avoid posting to public repos, social platforms, or messengers.
- Delete local design assets once the review concludes unless Mondooli extends explicit permission.
- Reach out to novistya.rahmawati@mondooli.com for clarifications before distributing anything externally.