

APPENDIX A — BUILD ORDER CHECKLIST

(Authoritative implementation sequence)

This checklist exists to prevent wasted work, refactors, and AI drift.

PHASE 0 — REPO & TOOLING (DO FIRST)

1. Initialize repo
 - Next.js (App Router)
 - TypeScript enabled
2. Install core dependencies:
 - Tailwind CSS
 - Zustand
 - React Hook Form
 - Prisma
 - NextAuth
 - Stripe SDK
3. Environment variables scaffolded:
 - DATABASE_URL
 - NEXTAUTH_SECRET
 - STRIPE_SECRET_KEY
 - AI_API_KEYS (per provider)



Do not write feature code yet

PHASE 1 — DATA & STATE FOUNDATIONS (CRITICAL)

4. Implement database schema (see Appendix B)
5. Run initial Prisma migration
6. Seed:
 - Exercise metadata (IDs, framework, topic, prompt)
7. Implement global state:
 - Auth state
 - Subscription tier
 - Conversation state enum
 - Crisis flag



Nothing user-visible yet

PHASE 2 — AUTH & BILLING

8. Implement NextAuth
9. Stripe subscriptions:
 - Free vs Premium enforcement
 - Per-seat institutional billing
10. Gate features by tier:
 - AI model access
 - Exercise limits

- Journal analysis

PHASE 3 — ONBOARDING FLOW

- 11 Build onboarding UI
 - 12 Persist UserBaselineProfile
 - 13 Require completion before chat
 - 14 Inject baseline into AI context
- ✓ App can now safely start conversations

PHASE 4 — AI CONTROLLER (MOST IMPORTANT)

- 15 Implement AIController:
 - Load system prompt v3
 - Load memory
 - Enforce state machine
 - 16 Implement Exercise Suggestion Gate
 - 17 Implement Crisis Detection Middleware
 - 18 Implement Model Routing by tier
- ✓ Chat works end-to-end

PHASE 5 — EXERCISES

- 19 Inline exercise cards in chat
- 20 Exercise facilitation engine
- 21 Reflection submission + completion logging
- 22 Custom exercise generator (framework-bound)

PHASE 6 — JOURNAL SYSTEM

- 23 Journal editor (text + voice)
- 24 Immediate AI analysis (premium)
- 25 Store insights separately from raw entries

PHASE 7 — ANALYTICS & GAMIFICATION

- 26 Analytics queries
- 27 Charts & trends
- 28 Gamification counters (optional toggle)

PHASE 8 — INSTITUTIONAL ADMIN

- 29 Admin dashboard
- 30 Seat management
- 31 Aggregate analytics only
- 32 Crisis alert dispatch

PHASE 9 — QA & HARDENING

- 33 Crisis scenario testing
- 34 Decline-exercise enforcement tests
- 35 Subscription downgrade tests
- 36 Data export verification