



PICK MY DISH

Your Personal Cooking Companion

- Time-aware
- Mood-based
- Ingredient-aware

Intelligent Recipe Recommendation System

Team Members:

Kamdeu Yamdjeuson Neil Marshall (Backend & DevOps)
Tuheu Tchoubi Pempeme Moussa Fahdil (Frontend & UI/UX)

The Problem & Our Solution



THE CHALLENGE



Decision Fatigue



Limited Resources



Time Constraints



No Personalization



OUR SOLUTION



AI Recommendations



Smart Filtering

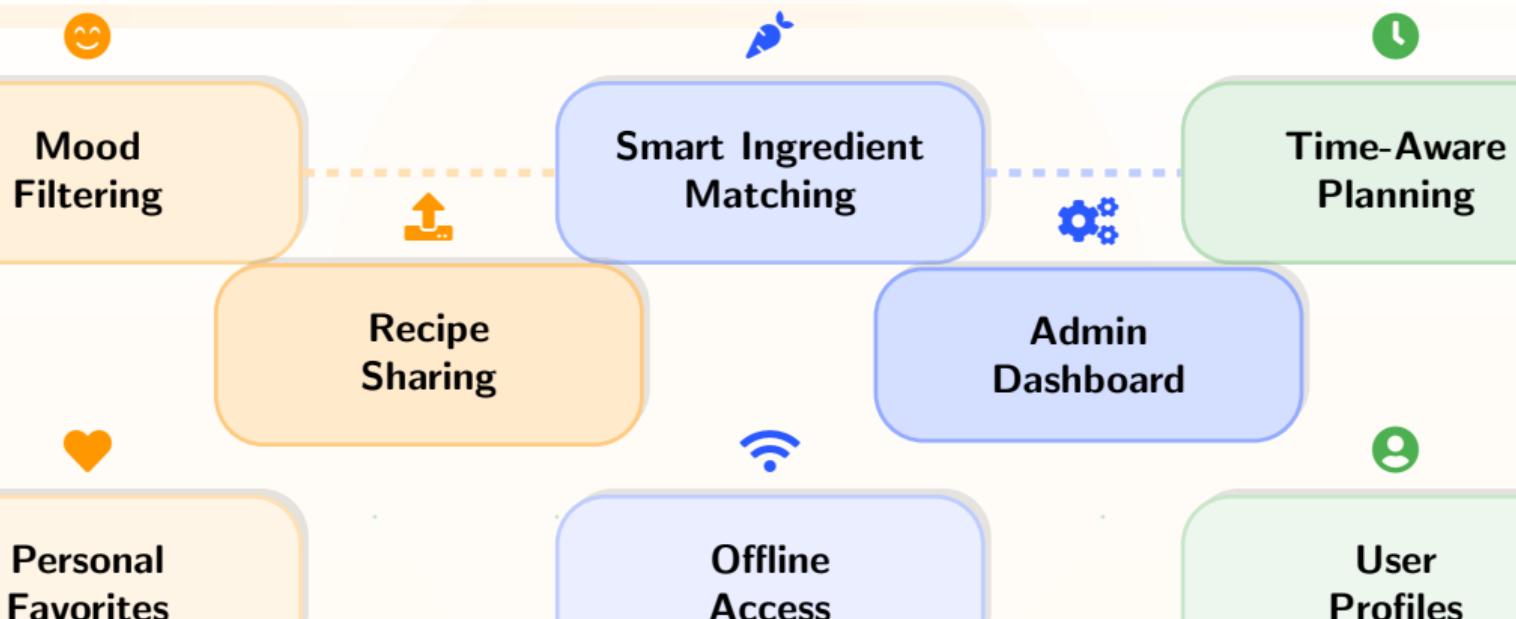


Quick Planning



Mood-Aware

Intelligent Features for Seamless Cooking



Modern Stack for Scalable Solutions

 Frontend

 Backend

 DevOps & Tools

 Flutter

 Node.js

 Git/GitHub

 Provider State

 Express.js

 Jenkins

 Material UI

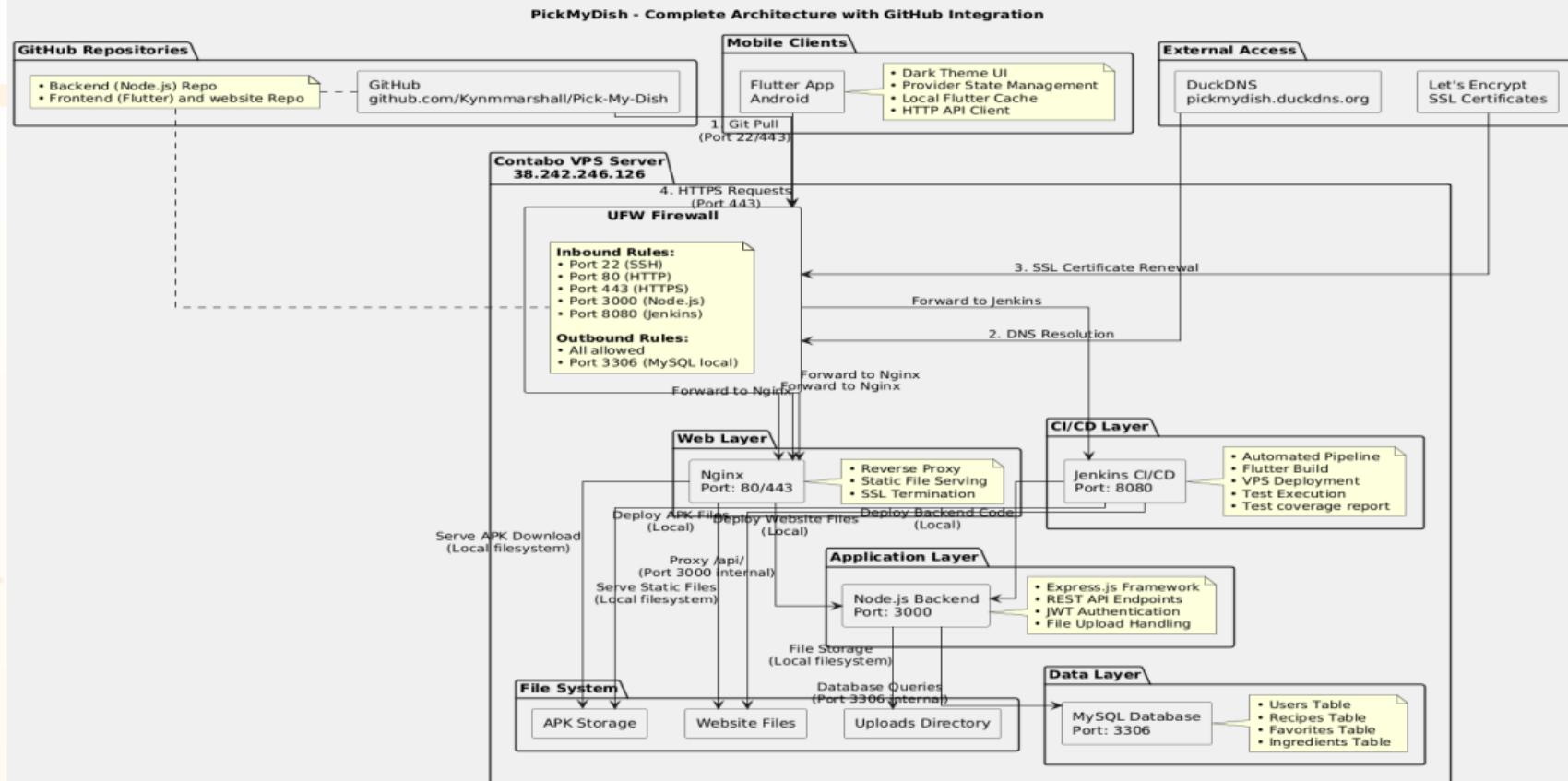
 MySQL

 Nginx

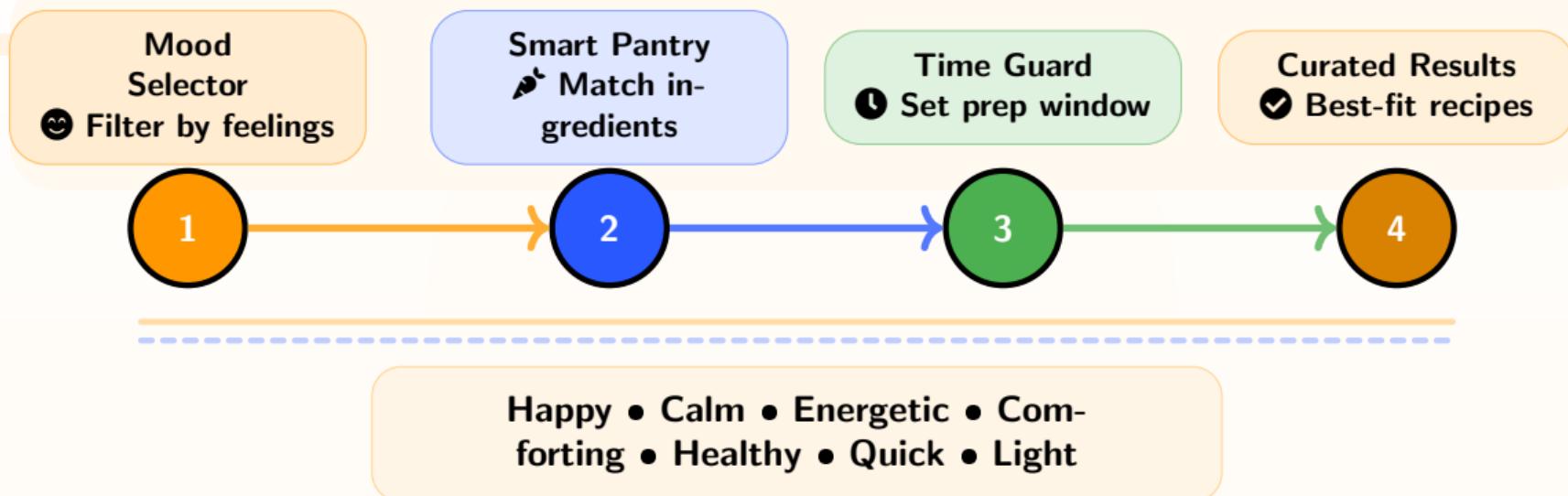
 JWT + Bcrypt

 Contabo VPS

System Architecture



User Flow: Mood-Based Recipe Discovery [INNOVATIONS]



Why it impresses: Adaptive filtering blends mood, pantry items, and prep time to present a shortlist that feels tailored. Real-time scoring ranks recipes by relevance, freshness, and dietary fit.

Design Patterns

 **Provider** Screens rebuild from app state

 **Repository** APIs + cache behind one interface

 **Factory** Creates recipe/user models consistently

 **Singleton** One config/auth client shared

 **Observer**
Mood/ingredient changes trigger UI

SOLID in Practice

S — Single Responsibility

UI shows, repo fetches, service computes

O — Open/Closed

Add filters without changing base screens

L — Liskov Substitution

Swap any recipe source via the interface

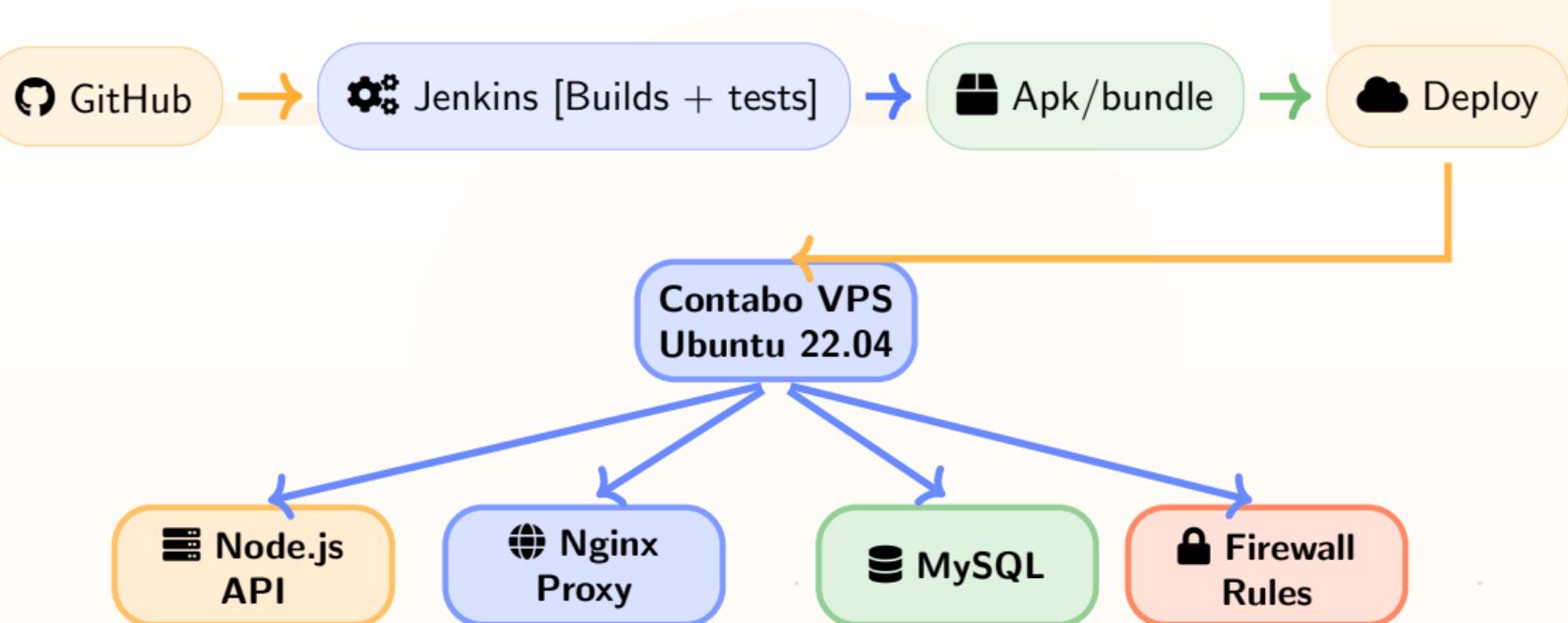
I — Interface Segregation

Separate auth, recipe, storage

D — Dependency Inversion

UI leans on abstractions; inject repos

Deployment & DevOps Pipeline (SUMMARY)



⌚ CI = 5 minutes — ⚡ Zero-downtime
proxy swaps — ↗ Monitored uptime 99.8%

Testing & Quality Metrics

Coverage (Actual)

80.9% actual

80% target

Lowest

coverage (focus next):

profile_screen.dart	65.1%
recipe_upload_screen.dart	65.6%
recipe_edit_screen.dart	68.5%

Performance (Latest Run)

Metric	Target	Actual
Recipe Load Time	2s	1.6s
API Response	500ms	410ms
DB Query	300ms	240ms
Uptime (30d)	99.8%	99.6%

Optimizations:

- Redis caching for frequent recipes
 - API response optimization
 - Real-time monitoring alerts

Achievements

- Fully functional cross-platform app
- Secure authentication system
- Seamless data synchronization across devices
- Fast, responsive UI
- Automated deployment
- Comprehensive testing

Future Enhancements

- AI-powered recommendations
- Multi-language support
- Advanced analytics
- Smart notifications
- Nutrition tracking
- Social sharing

Thank You!

Questions & Discussion



 [GitHub Repository](#)

 [Live Application](#)

Scan to Access



pickmydish.duckdns.org

Mobile app APK available for download