PICK MY DISH

Your Personal Cooking Companion

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

Intelligent Recipe Recommendation System

Team Members:

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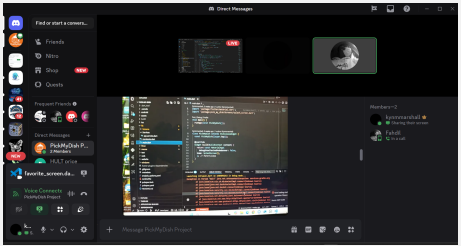
The Problem & Our Solution

THE CHALLENGE	OUR SOLUTION
Decision Fatigue	AI Recommendations
Limited Resources	Smart Filtering
Time Constraints	Quick Planning
No Personalization	Mood-Aware

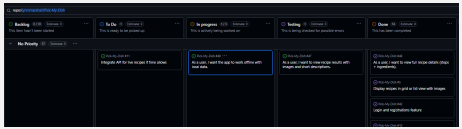
Agile Project Management Methodology

Daily Scrum Meeting



Daily Scrum: 15-min team sync
3 Questions: Yesterday/Today/Blockers
Outcome: Kanban board updates

Kanban Board



Kanban Flow: *To Do → In Progress → Review → Done*
WIP Limits: Max 3 tasks/column

Modern Stack for Scalable Solutions

Frontend

- Flutter
- Provider State
- Material UI

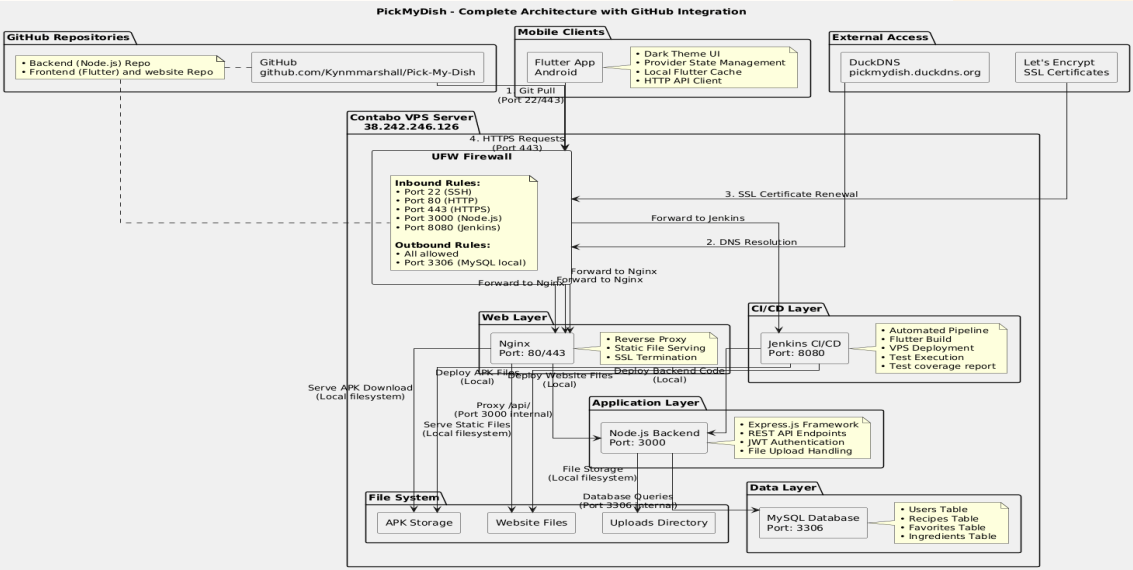
Backend

- Node.js
- Express.js
- MySQL
- JWT + Bcrypt

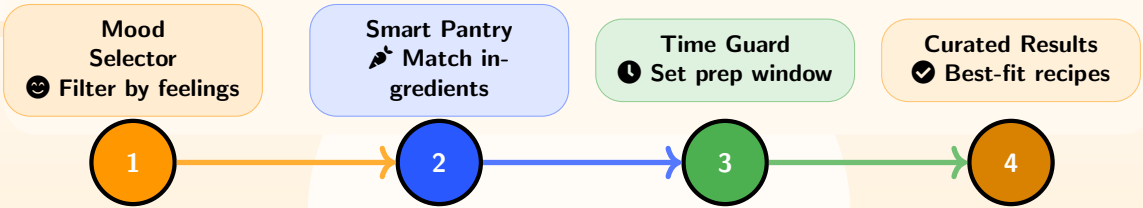
DevOps & Tools

- Git/GitHub
- Jenkins
- Nginx
- Contabo VPS

System Architecture



User Flow: Mood-Based Recipe Discovery [INNOVATIONS]



Happy • Calm • Energetic • Comforting • Healthy • Quick • Light

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 & SOLID Principles

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

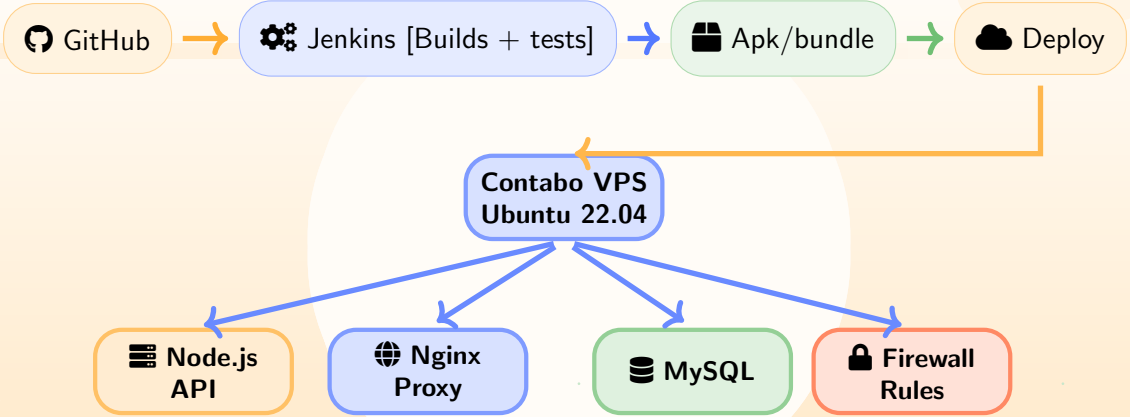
O — Open/Closed Add filters without changing base screens

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

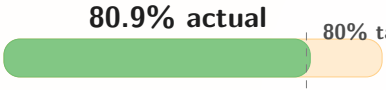
Deployment & DevOps Pipeline (SUMMARY)



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

Testing & Quality Metrics

Coverage (Actual)



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

Conclusion & Future Roadmap

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