



Meet

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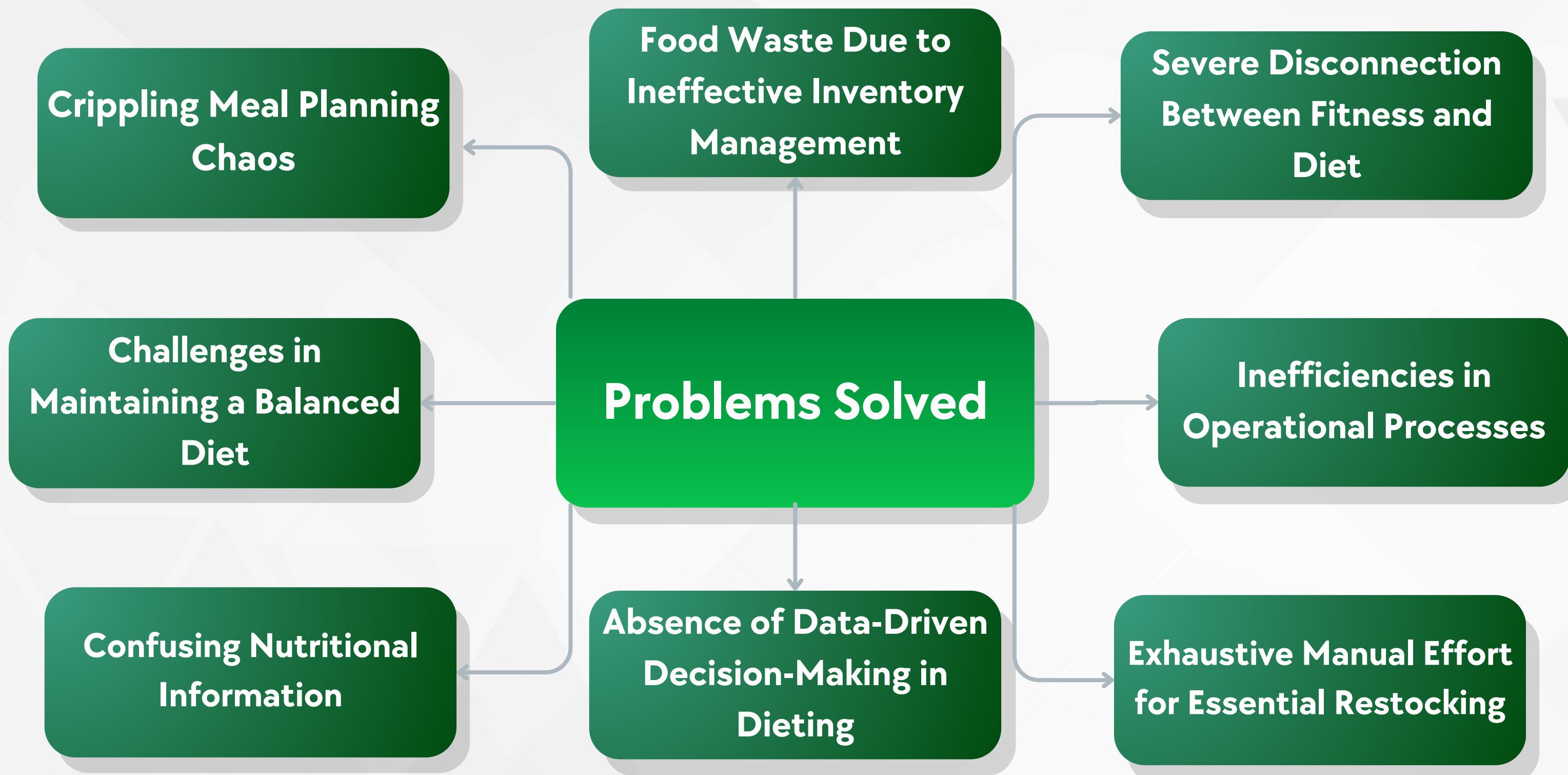


Advanced Technology Meets Culinary Artistry: The Future of Nutrition, the Future Kitchen

Team: Technovation
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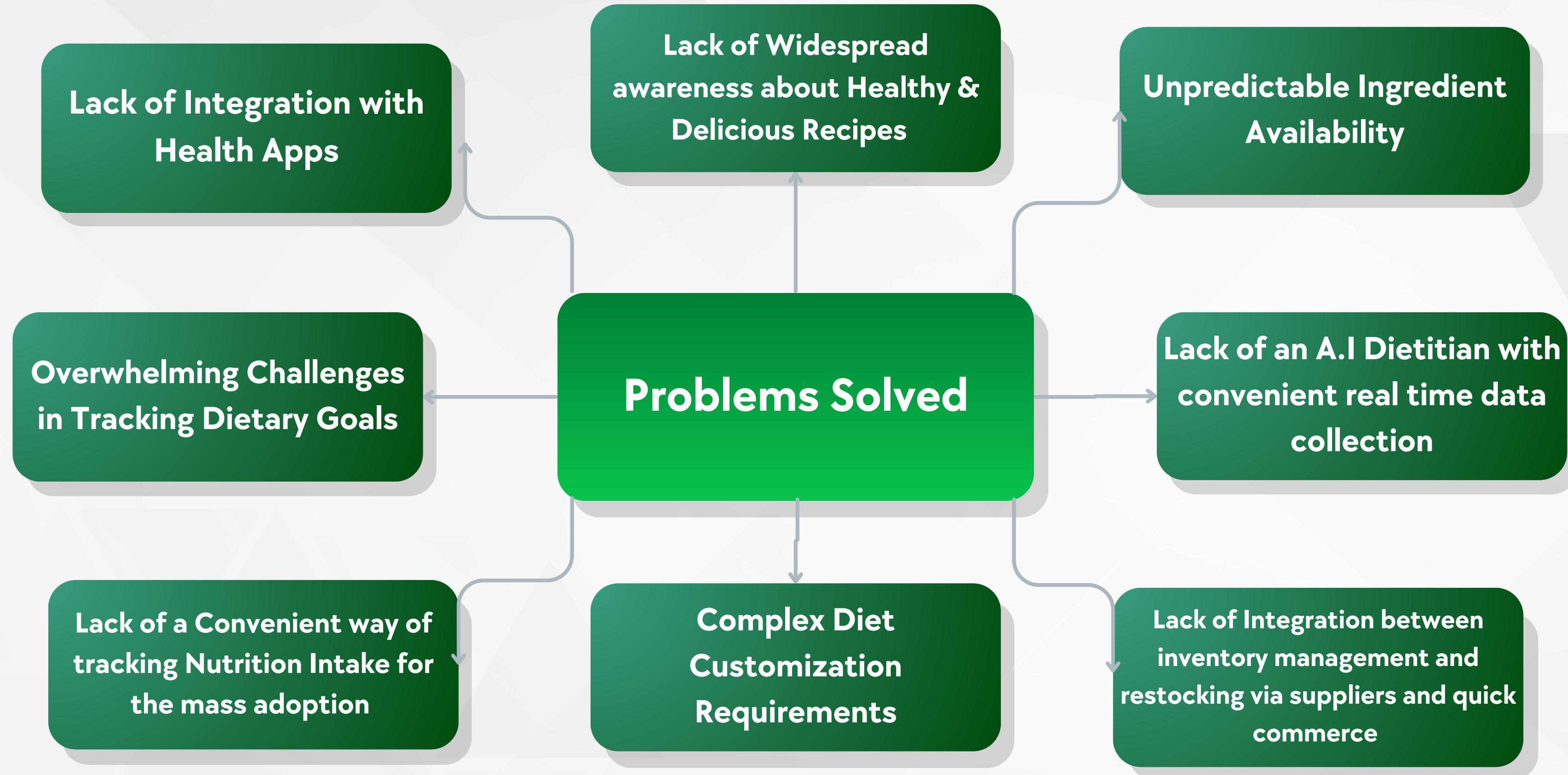
**COLOSSUS
HACKATHON**





Many Problems, One Solution

NUTRIGENIUS



Many Problems, One Solution

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Features



PantryPilot

Smart Computer Vision Based
Inventory Management System

RecipeRevolution A.I

Meal Recipe recommendation based
on CalorieCraft and PantryPilot data

HealthSync Tracker

Fitness Tracker watch/band
integration for overall calorie
deficit analysis

EatSmart Dietitian A.I

Adaptive A.I Powered Dietitian,
based on real time data

CalorieCraft A.I

Image M.L Model based Calorie
Counter

RapidRestock

based on CalorieCraft and PantryPilot
data, Orders and restocks ingredients

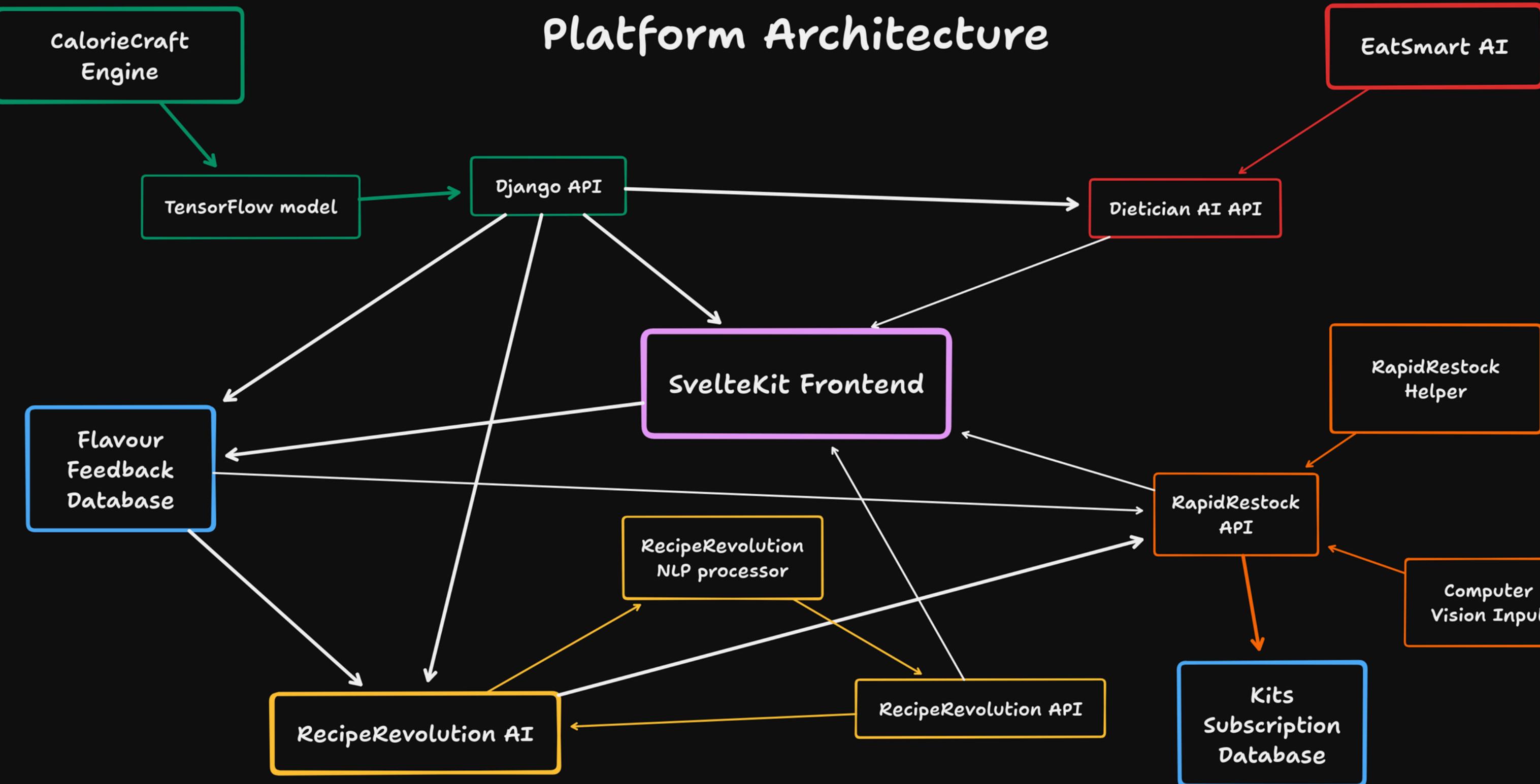
Commercial Applications

Features for Restaurants, Food & Hospitality Industry

GreenPlate Kit Service

A subscription service with super
personalized recommendations
based on your diet requirements

Platform Architecture





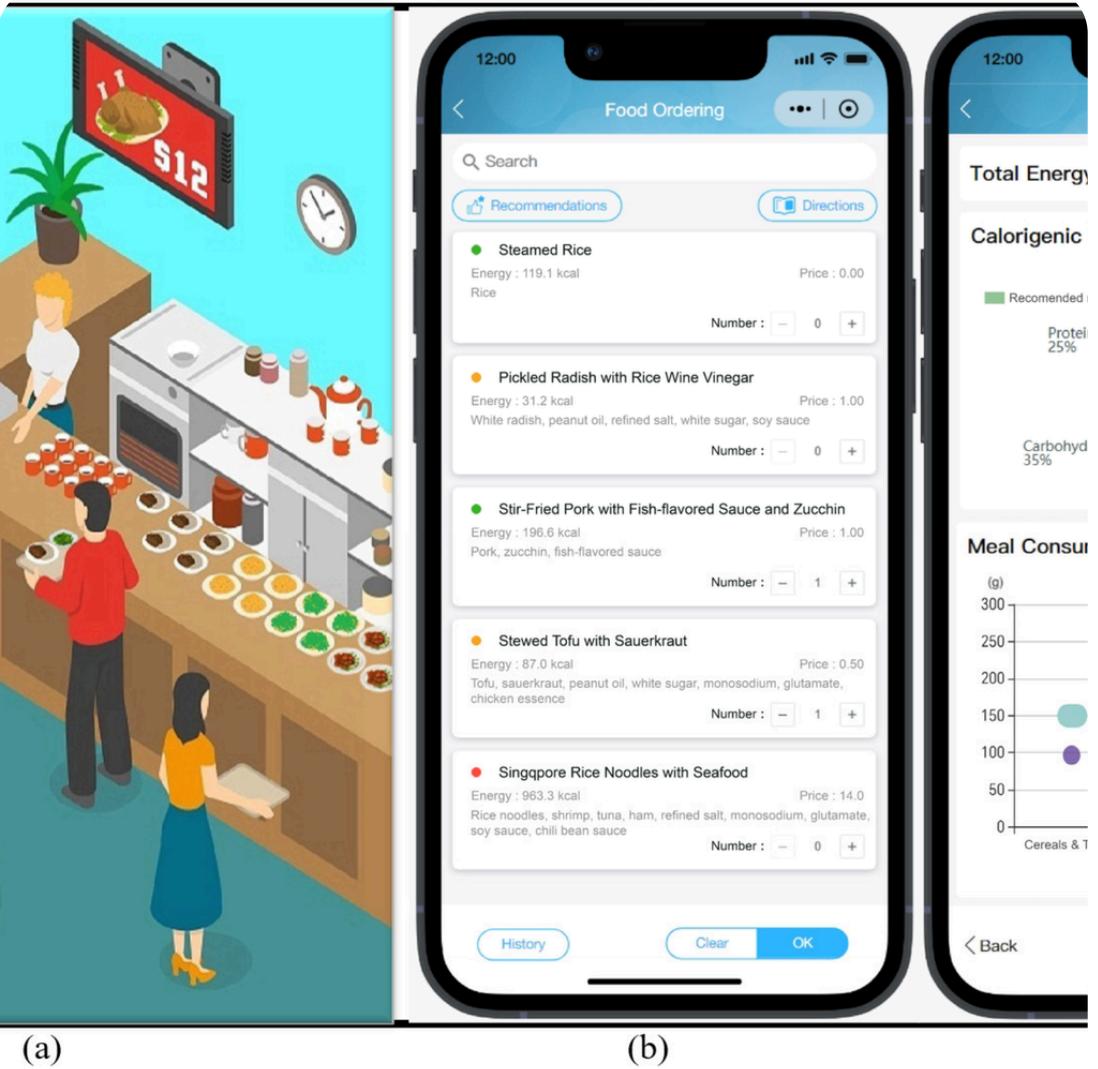
CalorieCraft A.I.

Image M.L based Calorie Counter

Calorie Craft Engine Overview: Advanced calorie estimation tool using machine learning and image recognition

Key Features:

- Instant calorie estimation from food photos
- Utilizes cutting-edge machine learning algorithms
- Enhances accuracy with scale integration
- Seamless integration with diet tracking features



EatSmart Dietitian A.I

Adaptive A.I Powered Dietitian, based on real time data

Eat Smart Dietitian AI: Adaptive AI-Powered Dietitian

Overview: An intelligent nutrition management system utilizing real-time data for personalized dietary guidance

Key Features:

- Real-time data analysis for up-to-date dietary recommendations
- Personalized nutrition plans adapting to user's changing needs
- AI-driven insights for balanced and health-focused eating habits

PantryPilot

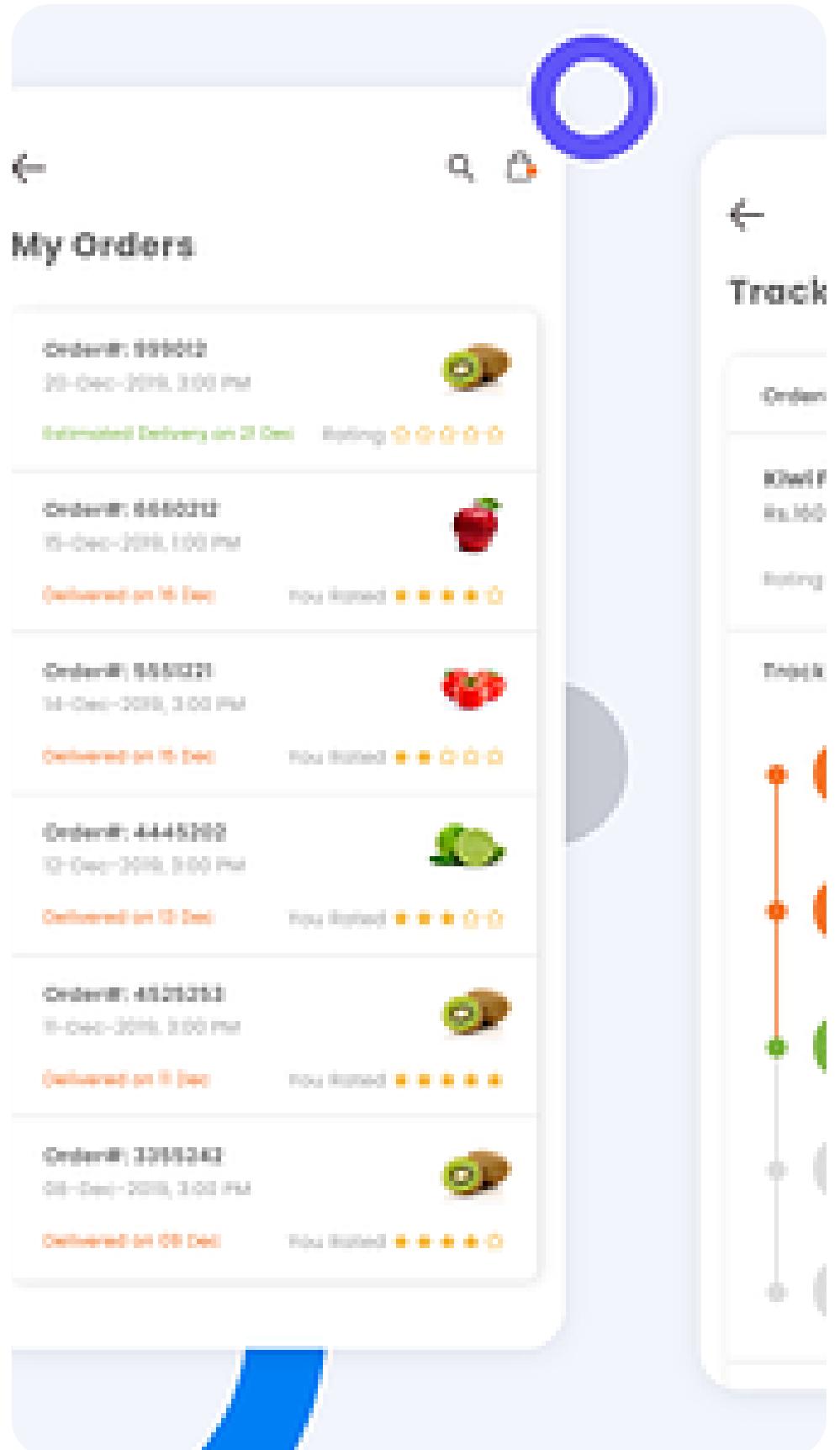
Smart Computer Vision Based Inventory Management System

PantryPilot Overview: An advanced inventory management system using computer vision technology to track pantry and refrigerator stock

Smart C.V. Based Inventory Management:

- Utilizes integrated computer vision and real-time data from scales
- Monitors kitchen inventory continuously
- Provides timely alerts for low stock
- Suggests restocking options





RapidRestock

based on CalorieCraft and PantryPilot data, Orders and restocks ingredients

RapidRestock Overview: Automated ordering system that restocks ingredients based on CalorieCraft and PantryPilot data

RapidRestock Key Features:

- Integrates data from CalorieCraft and PantryPilot
- Analyzes consumption patterns and inventory levels
- Automatically places orders for depleted ingredients
- Ensures kitchen is always stocked with essential items



Data-Driven Meal Kits

GreenPlate Meal Kit Subscription Service

- **Personalized Nutrition:** Utilize CalorieCraft's AI to tailor meal plans to individual dietary needs and goals
- **Smart Inventory Management:** Implement PantryPilot and RapidRestock for efficient ingredient sourcing and reduced waste
- **Recipe Innovation:** Leverage RecipeRevolution to create unique, trending plant-based recipes based on customer preferences
- **Health Integration:** Sync with HealthSync Tracker to provide meals that complement customers' fitness routines
- **Predictive Analytics:** Use AI-driven insights to anticipate customer preferences and optimize meal offerings



RecipeRevolution Meal Delivery

RecipeRevolution

AI-Powered Meal Recommendations

RecipeRevolution Overview: Intelligent recipe recommendation system based on CalorieCraft and PantryPilot data

RecipeRevolution Features:

- Analyzes nutritional needs from CalorieCraft
- Considers available ingredients from PantryPilot
- Suggests personalized meal recipes
- Adapts to dietary preferences and restrictions

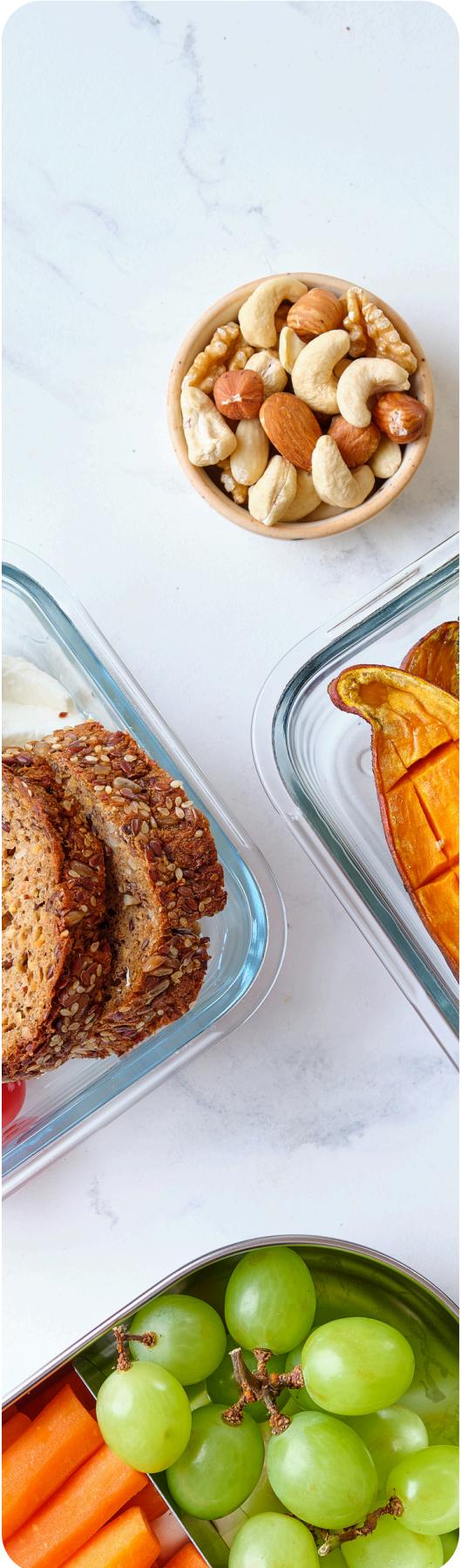
HealthSync Tracker

Integrated Fitness Monitoring

HealthSync Tracker: Comprehensive Fitness Integration

Key Features:

- Seamless integration with a wide array of popular fitness trackers, smartwatches, and health monitoring devices
- Real-time synchronization of activity data, vital statistics, and sleep patterns for a holistic health overview
- Advanced calorie deficit analysis, taking into account both dietary intake and physical activity expenditure
- Personalized insights and recommendations for optimizing fitness routines, based on individual goals and performance metrics
- Adaptive goal-setting that evolves with your progress and changing fitness levels
- Detailed breakdown of workout intensity, duration, and effectiveness to help fine-tune exercise regimens



Commercial Applications

Features for Restaurants, Food & Hospitality Industry

NutriSmart: Commercial Applications for Restaurants and Hospitality

Menu Optimization:

- Use AI-driven insights to create balanced, nutritious menus
- Offer precise calorie and nutritional information for each dish
- Easily adapt menus for special dietary requirements (e.g., gluten-free, vegan)

Inventory Management:

- Implement PantryPilot for real-time tracking of ingredient stock
- Reduce food waste through predictive ordering
- Streamline supply chain management with RapidRestock integration

Customer Experience Enhancement:

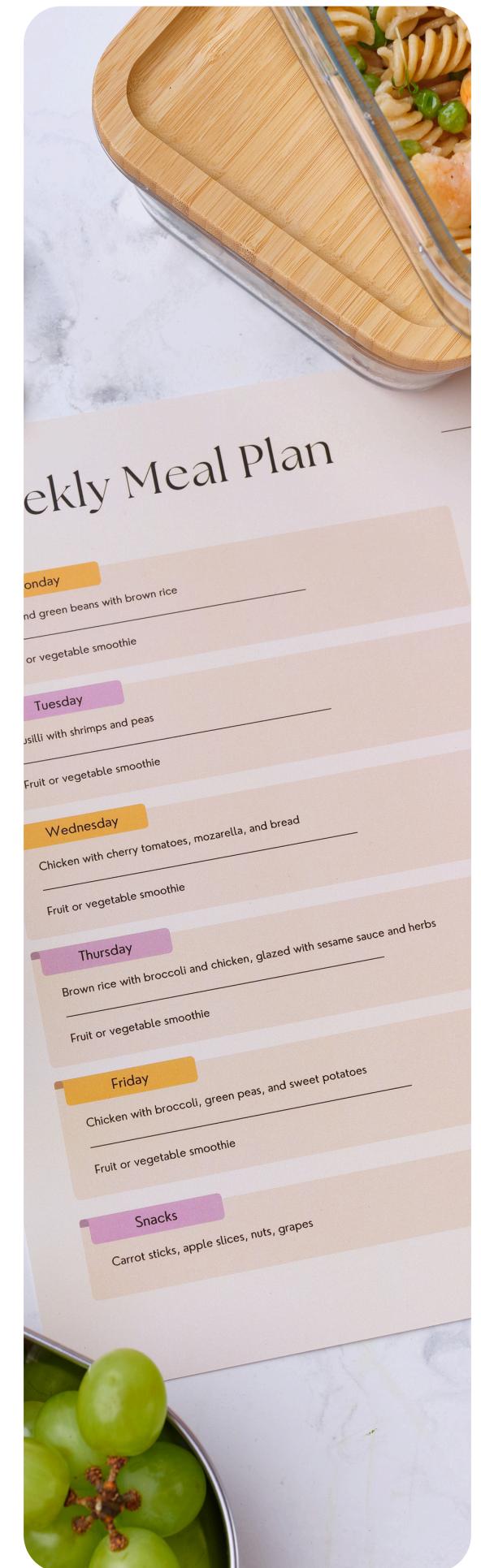
- Provide personalized meal recommendations based on customer preferences and dietary needs
- Offer detailed nutritional information through user-friendly interfaces (e.g., QR codes, apps) •
- Enable customers to track their meals within their personal NutriSmart accounts

Operational Efficiency:

- Optimize kitchen processes with AI-driven insights on ingredient usage and meal popularity
- Improve staff training with detailed recipe and nutritional information readily available
- Enhance quality control through consistent portion sizing and ingredient tracking

Marketing and Branding:

- Differentiate by offering a tech-forward, health-conscious dining experience
- Use data insights to create targeted marketing campaigns
- Build customer loyalty through personalized nutrition tracking and recommendations



Tech Stack

django



SVELTE KIT



tailwindcss



python™



OpenCV



SQLite

Gemini



**NVIDIA
CUDA**



TensorFlow



git

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TEAM

Members

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Thank You!

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Team: Technovation
Chirag A Chintal & Aditya Raj

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