

# What is Walleterium Imperium?

BASIC

AI BASED

- 1) LOGIN
  - 2) BASIC MONEY MANAGER
  - 3) AUTO-DETECT PAYEE BASED ON PATTERN
- 1) OCR Bankstatement
  - 2) RECEIPT
  - 3) AUTO-CATEGORIZATION (WOR)

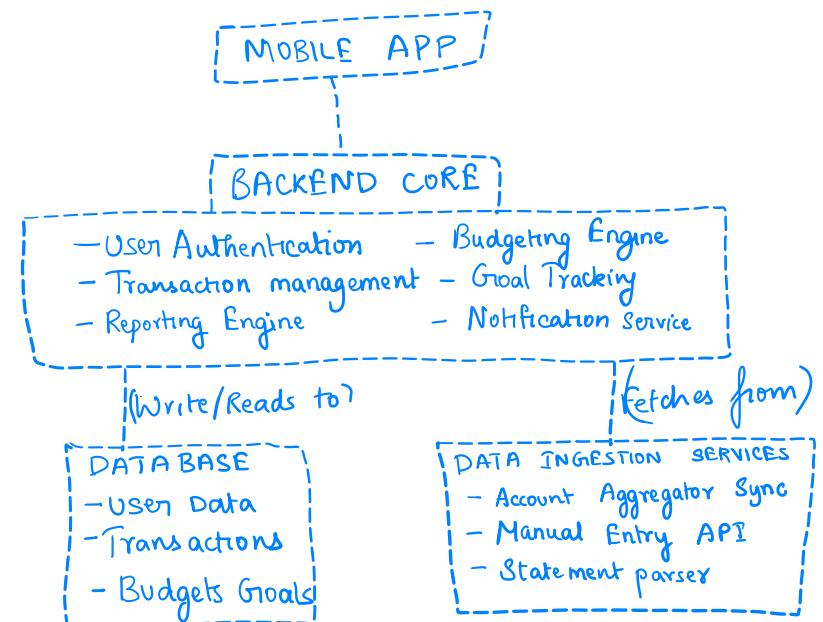


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# CORE FOUNDATION

## MUST HAVES

- 1) MANUAL ENTRY
- 2) AUTO SYNC
  - Bank acc
  - Credit Cards
  - Digital wallet
- 3) Smart Categorization:
- 4) flexible budgeting
  - monthly, weekly (or) custom budgets
  - visual feedback (progress bar)
- 5) Alerts when approaching (or) exceeded
- 6) NET WORTH TRACKING [CASH + ALL ACCOUNT (IN-OUT) + Liabilities]
- 7) USER FRIENDLY FIRST TIME SETUP
- 8) IDENTIFY LIFESTYLE INFLATION / SAVING HABIT
- 9) GOAL SETTING



# PART-I CORE APP STRUCTURE (Intelligence will be built over this)

## MODULE 1 : USER & ACCOUNT MANAGEMENT

- 1) Signup / login
- 2) MFA
- 3) password recovery

### USER PROFILE & SETTINGS [AI POWERED INTERACTIVE ONBOARDING]

- 1) Basic user information
- 2) Persona selection
- 3) Currency & language preferences
- 4) Notification controls

MAKES API CALL  
Saves data in JSON  
ie the user answers  
and sends data to data layer  
via core API

## MODULE 2: DATA LAYER

USERS: id, profile info, selected persona, security tokens

Ref table to  
transactions  
via AES

TRANSACTIONS: id, user id, amt, currency, payee, date, category id,

Source, notes, is\_recurring, raw text OCR.

ACCOUNTS: id, user id, acct name, type, api token for sync.

BUDGET & GOALS: id, user id, category id, target amt, current amt, period, start & end date.

GAMIFICATION: USER\_XP: id, total xp, current level

ACHIEVEMENTS: id, name, description, icon url

USER\_ACHIEVEMENTS: a table linking user to their achievements.

ITEMIZED INVENTORY: id, user id, item name, last purchase date, purchase frequency, est\_consumption\_rate

Subscription management

## MODULE 3: CORE BACKEND SERVICES

RESTful API: Post transactions

GET Budgets

GET user profile

BANK AGGREGATION SERVICE:

CRON JOB: • Check recurring bills

• Resetting monthly budgets (again can use AI)

• Running nightly data analysis

## MODULE 4: GOOGLE WALLET INTEGRATION

PASS DEFINITION SERVICE: contains templates for each pass

[Saving goals, Spending Summary, Badges, Shopping lists, Alerts]

PASS GENERATION & ISSUE SERVICE: Data + template = unique pass

REALTIME PUSH & UPDATE SERVICE: Triggers from module makes

API call to update() or patch() pass in the wallet, triggering a push notification.

# PART-II AI & INTELLIGENCE

## MODULE 5: MULTI MODAL DATA INGESTION & ENRICHMENT

INPUT PROCESSOR: Accepts & queues data from multiple sources

→ Image uploads

→ PDF

→ Short video uploads (optional)

→ Live video (optional)

Blinkit — No category — Medium products — category

### NLP Engine:

1) MULTI-LINGUAL OCR

2) CONTEXTUAL ANALYSIS ENGINE

- entity recognition
- Transaction Classification
- Item level parsing

Show UI in nested way

eg: BLINKIT  
- milk  
- curd

mpf

## MODULE 6: GEMINI POWERED COACHING & REASONING CORE

### 6.1 Persona driven AI Engine:

→ Based on user onboarding 'persona file' should be uploaded to Gemini agent.

#### FILE:

- Tone
- Budget/Goals
- Advice context: eg: look for tax deductables for freelancer.

### 6.2 Contextual Query Engine

→ NLQ search

→ Bot to query multiple DB

Eg: should be able to ans, warranty details

or compare grocery.

### 6.3 Proactive & predictive Intelligence Engine

→ Spending velocity analysis

→ predictive inventory management

→ Actionable Insight generator (eg: calling recipe generator)

CREATE SHOPPING LIST BTN

### MODULE 7:

#### • Quest & Achievement Engine:

→ Triggered by 6.3, eg: when it detects a save of 15%. will call fungal master

→ xp to be issued

#### • Dynamic Action Service:

→ When Quest engine assigns award (or) Insight generator has an alert, this service should format payload

→ Then calls module 4 to update pass

→ Investment plans & savings plans

→



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**LOCALE** → 3) Currency & language preferences

4) Notification controls

Notification Categories w/  
system settings? How does  
it work?

MAKES API CALL

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## MODULE 2: DATA LAYER

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separate structure

session!

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Subscription management

Total?  
Per timer?

## MODULE 3: CORE BACKEND SERVICES

RESTful API: Post transactions [Google Wallet]

GET Budgets

GET User profile [Google acc services]

## BANK AGGREGATION SERVICE:

CRON JOB: • check recurring bills → is this payable against credit card?

• Resetting monthly budgets (again can use AI)

• Running nightly data analysis

Metric to focus on  
Down Metrics: Default strong based on persona?

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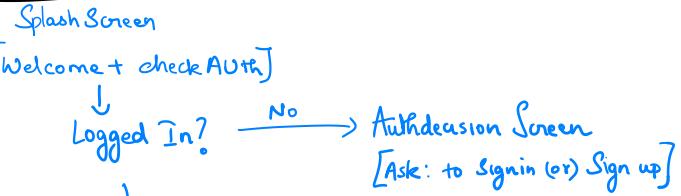
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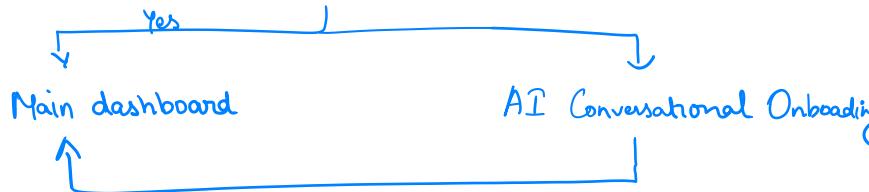
- MONEY MANAGER BASIC
- ADD MONEY MANAGER WITH RECEIPTS [AI SCOPE]
- ANY LANGUAGE (THROUGHOUT THE APP)
- LOGIN enabled
- SPEND ANALYSIS
- LINK WITH BANK - APIs
- CATEGORISE SPENDING / ANALYSE WITH BANK STATEMENT
- TRACK MULTIPLE ACCOUNTS
- BALANCE TREND
  - Track subscriptions / long term recurring expenses
  - If I purchase from village mark it should auto detect like CRED
  - powerful search & filtering
- Shared wallet
- 256-bit AES encryption for data
- MFA

## Onboarding & Setup flow



After Successful Auth

Is profile set?



## Firebase & Backend Setup

- 1) Setup Firestore DB
- 2) Enable Google Auth in Firebase | Rules is also set  
(allows user to read & write only if they are authenticated)
- 3) Connect flutterflow + Firestore

## Required Screens - 8

- 1) Splash Screen
- 2) Main dashboard
- 3) Auth decisionscreen
- 4) Signin /signup toggle
- 5) AI conversational Onboarding

## Feature 2: CORE APP & AI INTEGRATION

- 1) Main dashboard
- 2) AI Assistant Screen
- 3) Multimodal Capture Screen
- 4) Receipt Review Screen

### CONNECTED BACKEND SERVICES

Firestore service - Stores userprofile, receipts, insights & chat history

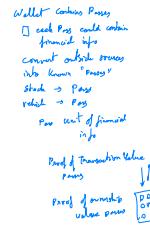
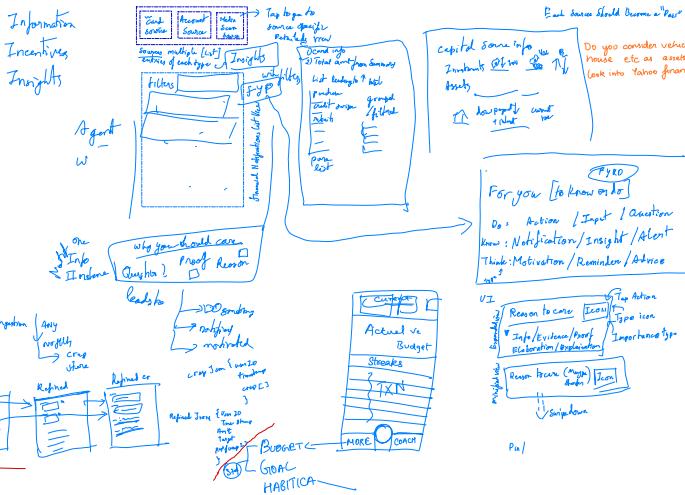
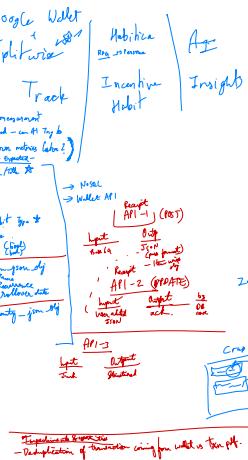
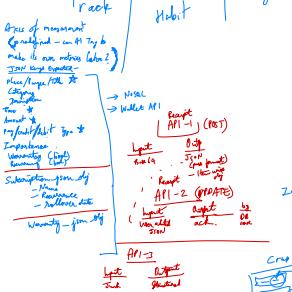
Gemini text engine -

Gemini Vision engine

Google Wallet API layer

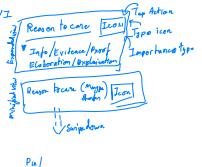
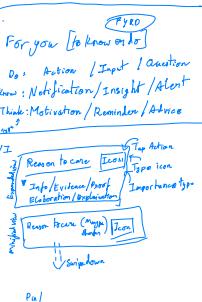


Kunnen



Wallet Context Pages  
 each page could contain financial info  
 convert outside sources into known money  
 stock → Pay  
 real estate → Pay  
 new sort of financial info

Proof of transaction value  
rows  
Rows of amounts  
values sorted



) Currency & Language change universally



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