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PRESENTS

Agentic AI Day

Build the next generation of intelligent agents

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Team Details

    a.   **Team name:** NoChatGPT

    b.   **Team leader name:** Adepu Nithinvas

    c.   **Problem statement:** Receipt Management for Google Wallet

Brief about the idea

A closed-loop system where receipts self-transform into executable financial actions inside Google Wallet—minimal human intervention required

1. AI Digestion
- Users snap/upload receipts → Gemini extracts items, prices, and context

2. Smart Enrichment
- Data pipelines (Dataflow/Firestore) merge with Merchant databases (Retail API) , Spending history (BigQuery ML), Local offers (Maps Platform)

3. Action Generation
- Vertex AI Agent decides optimal output like Refund claim pass (for overcharges), Dynamic shopping list (for pantry tracking) ,Subscription cancel button (for unused services)

4. Wallet Execution
- Passes pushed via Google Wallet API → Users take action with one tap (no apps, no forms).

(Gemini handles multimodal ingestion + text extraction. Vertex AI Agent interprets and determines the best financial action to take)

Opportunities

- How different is it from any of the other existing ideas?

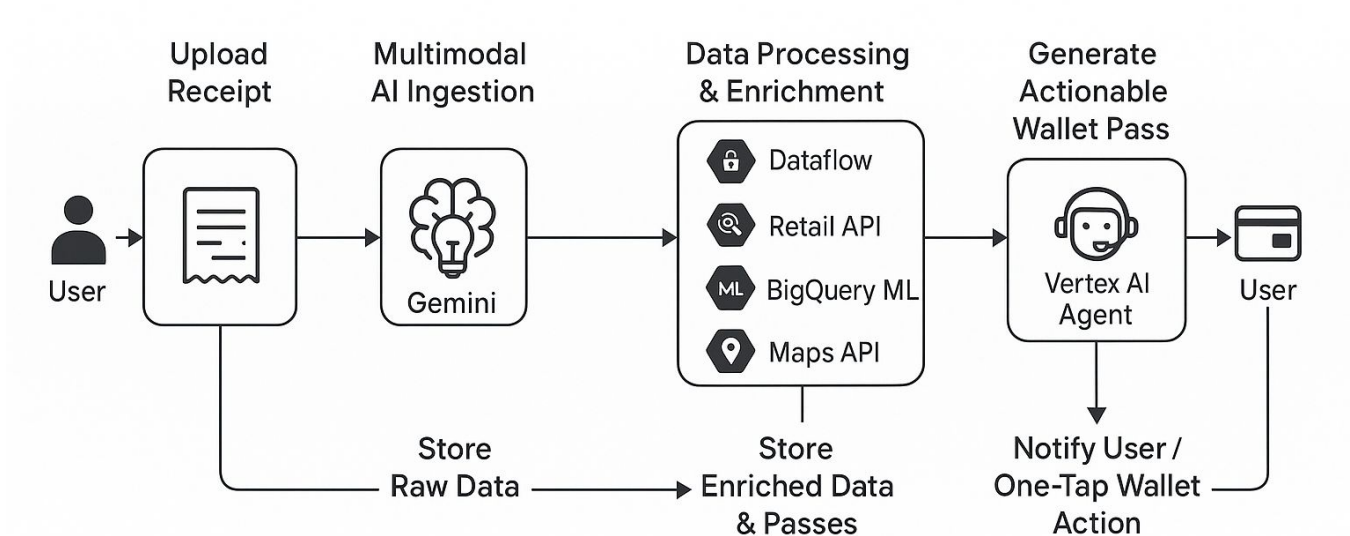| Aspect	Competitors	Project Raseed/Our Idea
Data Ingestion	Manual entry/OCR limitations	Multimodal Gemini processing (images/videos/ live streams in 100+ languages)
Insight Delivery	Separate dashboards	Native Google Wallet integration with dynamic passes
Proactivity	User-initiated queries	AI-driven push notifications for savings opportunities
Actionability	Static reports	Executable passes (shopping lists, subscription cancellations)

Opportunities

- ## How will it be able to solve the problem?

    - Our AI-first approach automates the entire receipt-to-insight pipeline by:
        - Eliminating manual entry with multimodal Gemini AI (photos/videos/voice → structured data),
        - Embedding actions in Google Wallet (dynamic passes for savings/refunds vs. static reports),
        - Proactively optimizing finances (real-time alerts + predictive budgeting via BigQuery ML),
        - Reducing user effort to near-zero (e.g., auto-canceling subscriptions via Wallet passes).

- ## USP of the proposed solution

Closed-loop automation	From receipt image → AI extraction → Wallet pass generation → push notification - Fully autonomous (no human-in-the-loop)
Context-aware pass generation	Dynamically creates different pass types : Refund claims (for overcharges), Savings triggers (e.g., "Buy at Store X tomorrow for 15% off"), Subscription controls (cancel/renewal reminders)
Real-time enrichment	Augments receipt data with Merchant price histories (via Retail API), User spending patterns (BigQuery ML), Localized offers (Google Maps Platform)

List of features offered by the solution

Multimodal Receipt Ingestion	Accepts photos, videos, or voice descriptions of receipts - Supports 100+ languages via Gemini's OCR/NLP
Zero-Touch Data Extraction	Auto-detects items, prices, taxes, and merchant details - Categorizes spending (e.g., "Food & Beverage → Coffee")
Smart Pass Generation	Converts receipts into executable Google Wallet passes: One-tap refund requests, Subscription cancellation shortcuts Dynamic shopping lists
Proactive Financial Insights	Real-time alerts for Overcharges/duplicate bills Better nearby deals Budget breaches
Local-language support	Context-aware responses (e.g., recipe suggestions based on purchases)
Automated Savings Tools	Price-match guarantees (auto-generates claim passes) - Recurring subscription audits, Carbon footprint tracking
Seamless Wallet Integration	Native Google Wallet API integration - Auto-updating passes (e.g., "You've saved ₹1,280 this month!")
Privacy-First Architecture	On-device processing for sensitive data ,IAM-controlled access to financial insights

Process flow diagram or use-case diagram

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User → Upload Receipt → Multimodal AI Ingestion (Gemini) → Data Processing & Enrichment (Dataflow, Retail API, BigQuery ML, Maps API) → Generate Actionable Wallet Pass (Vertex AI Agent) → User

Store Raw Data → Store Enriched Data & Passes

Notify User / One-Tap Wallet Action

Technologies to be used in the solution

1. AI/ML Layer
- Gemini 1.5 Pro
- Vertex AI
- Dialogflow CX
- Recommendations AI

2. Data Processing
- Cloud Functions
- Dataflow
- Dataproc

3. Storage & Databases
- Firestore
- BigQuery
- Cloud Storage

4. APIs & Integrations
- Google Wallet API
- Retail API
- Google Maps Platform
- Cloud Endpoints

5. Analytics & Monitoring
- Looker (Google Data Studio)
- Cloud Logging/Monitoring
- Data Loss Prevention API

6. Frontend & Mobile
- Flutter
- Angular
- Firebase SDK
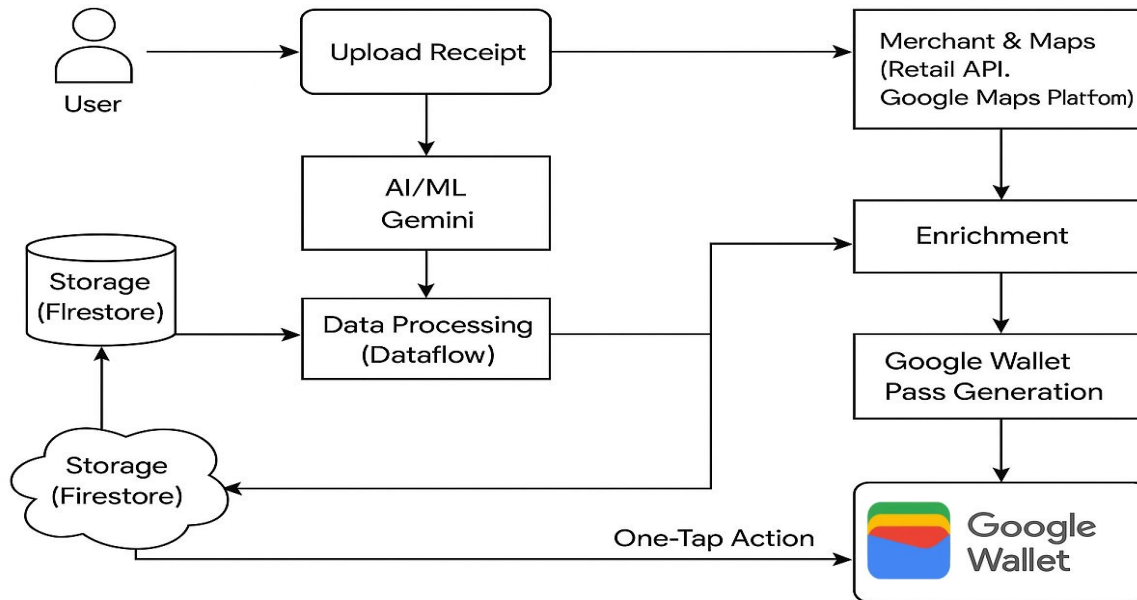
7. Security & DevOps
- IAM & Conditional Access
- Artifact Registry
- Cloud Build

8. Specialized Services
- Video Intelligence API
- Document AI

Architecture diagram of the proposed solution

Architecture Diagram