Here is the **Enhanced Master Blueprint (Version 2.0)**. It integrates the original strategic vision with the critical technical "missing bases" (Authentication, Webhooks, Timestamp Logic, and Rate Limiting) identified in our analysis.

MASTER BLUEPRINT: PROJECT DISKARTE AI (v2.0)

Owner: Solo Developer (You) | **Architecture:** "Google Anti-Gravity" | **Model:** Gemini 1.5 Flash (Exclusive)

I. Executive Summary

Mission: To democratize access to Artificial Intelligence for the Filipino "mass market" by removing the barrier of high monthly subscription fees 1.**The "Sachet" Concept:** Instead of ₱1,200/month, apply the "Tingi" economy model: bite-sized AI services for micro-payments (₱20–₱50) 2.**Core Promise:** *"Ang Secret Weapon ng Pinoy"* (The Filipino's Secret Weapon)—a survival tool for "Diskarte" in work and daily life 2.

II. The Product: "Diskarte AI" (MVP)

A. Target User Persona

- **Name:** Juan (23 y/o job seeker/contractual worker) 3.
- **Tech:** Low-end Android (Infinix/Tecno), prepaid data 3.
- **Platform Strategy: Progressive Web App (PWA)** for Day 1. Zero storage required; accessible via Messenger links 3.

B. Core Features (The "MVP" Menu)

1. **The Bureaucracy Breaker:** Generates formal letters/government forms (e.g., Indigency request, Mayor's office letters) 4.
2. **The Diskarte Toolkit:** Resume Fixer, Seller Reply Bot (Shopee/Lazada), and Grammar Polish 4.
3. **The Aral-Masa:** Homework helper that explains concepts rather than just answering 4.
4. **The Diskarte Coach:** A non-religious, stoic "success coach" for motivation 4.

C. Language & Intelligence Strategy

- **Model: Gemini 1.5 Flash (Exclusive)**. Selected for low cost, speed, and native integration with Firebase 5.
- **Capabilities:** Primary: **Taglish** (Code-switching); Secondary: **Cebuano/Bisaya** 6.
- **Prompt Engineering (New Requirement):** Distinct system instructions must be implemented for each feature to ensure the correct "Persona."
- *Default:* "You are a helpful Filipino assistant. Reply in the same language the user uses." 6
- *Bureaucracy Breaker:* "You are a formal correspondence expert. Use High Filipino-English suitable for government officials."
- *Diskarte Coach:* "You are a stoic friend. Use 'Tropa' tone. Use slang like 'Lodi' or 'Petmalu'. Be empowering but realistic."

III. The "Solo Dev" Technical Architecture

Philosophy: "Google Anti-Gravity" – Use AI Agents to write the code 6.

A. The Enhanced Tech Stack

Component,Technology,Logic/Reasoning
IDE,Firebase Studio (Project IDX),Browser-based with Gemini built-in 5.
Frontend,Flutter (Web),"Single codebase, responsive 5."
Auth,Firebase Authentication,(New) Critical for User Management. Use Google Sign-In or Phone Auth to reduce friction.
Backend,Firebase Cloud Functions,Python serverless logic 5.
Webhooks,Python Flask Route,(New) Endpoint to listen for PayMongo success signals.
Database,Firestore,"Stores user wallets, chat logs, and subscription timestamps 5."
AI Engine,Vertex AI (Gemini 1.5),Exclusive model usage to maintain single-ecosystem efficiency.

B. System Logic Flow (Corrected)

1. **Login:** User logs in via Google/Phone (Firebase Auth). Creates a User ID.
2. **Input:** User types/speaks in Taglish on diskarte.ph 7.
3. **Security Check:** Cloud Function checks **Rate Limit** (e.g., Max 10 requests/minute) to prevent abuse.
4. **Subscription Check:** Cloud Function checks Firestore: if current_time < subscription_end_time **(New Logic)**.
5. **Intelligence:** If valid, Python calls Vertex AI (Gemini 1.5 Flash) 7.
6. **Output:** Gemini returns text; displayed instantly to user 7.

IV. The Business & Revenue Model

A. Pricing Strategy

The "Unli-Pass" (MVP):
- **Price:** ₱20–₱50 for 24 Hours 7.
- **Logic: Timestamp Validation.** When payment is received, the system sets subscription_end_time = current_time + 24 hours in Firestore.

B. Payment Infrastructure

1. **Gateway:** PayMongo (GCash/Maya) 8.
2. **The Payment Loop (Critical Addition):**
3. User pays on PayMongo.
4. PayMongo sends a **Webhook** to your Firebase Cloud Function.
5. Cloud Function validates the secret key and updates the user's Firestore document (activates the Unli-Pass).

C. Profit Analysis

- **Net Revenue:** ~₱48.75 (after fees) 8.
- **Est. AI Cost:** ~₱5.00 (Heavy usage) 8.
- **Net Profit:** ~₱43.75 per user/day 8.

V. Logistics & Funding (The "One Month in PH" Plan)

A. Legal & Banking

- **DTI:** Register "Diskarte AI Services" 8.
- **Bank:** UnionBank or BPI Personal Savings 8.
- **BIR:** Apply for COR (Form 2303) 8.
- **Sim Card:** Activate Roaming (Globe/Smart) to receive OTPs abroad 8.

B. Funding Strategy

- **Google for Startups:** Apply for $2,000 USD credits. Research angle: "Low-Resource Language Resilience (Taglish/Cebuano) in GenAI" 9.

VI. Developer Implementation Guide (Prompts for Gemini)

Use these prompts in Project IDX to build the "Missing Bases":

1. **For Auth:** *"Scaffold a Flutter login screen using Firebase Authentication. Prioritize 'Sign in with Google' and 'Phone Number' login. Ensure the user ID is passed to Firestore."*
2. **For Database:** *"Create a Firestore schema that includes a users collection. Each user document should have a subscription_end_timestamp field."*
3. **For Webhooks:** *"Write a Python Cloud Function using Flask that listens for a PayMongo webhook. When a 'payment.paid' event is received, find the user in Firestore and add 24 hours to their subscription_end_timestamp."*
4. **For Logic:** *"Write the backend logic to check if datetime.now() is less than the user's subscription_end_timestamp. If true, call the Vertex AI Gemini API. If false, return a 'Please Subscribe' error."*