Antigravity System: Core Operational Logic & Business Requirements Document

1. Strategic Philosophy and Core Doctrines

The Antigravity system marks a definitive shift from legacy board-based tracking (Monday.com) to a relationship-centric operating system. While Monday.com serves as a high-velocity input layer, the business requires a stable, long-term institutional memory that static labels cannot provide. This transition mandates a move away from permanent, static status fields toward time-based roles, ensuring that the system captures the fluid evolution of a contact's relationship with the firm over a multi-year lifecycle.The system is governed by four non-negotiable guiding principles:

- **People Evolve:** Roles are temporary, but the contact record is permanent. A single human entity remains constant while their functional role—be it lead, client, or partner—changes over time.
- **History is Immutable:** Data integrity dictates that historical records must never be overwritten. Every change in a contact's intent or status is recorded as a new temporal event, preserving a perfect audit trail of the relationship.
- **"Active" as a Condition:** Activity is a computed state, not a manual toggle. The system must derive "Active" status from real-time behavioral signals and data logic rather than agent sentiment or manual field updates.
- **Truth Over Input:** Monday.com is an operational utility; Antigravity is the canonical source of truth. The system shall ingest raw input, normalize it against rigid business rules, and reclassify it to ensure the absolute integrity of reporting and analytics.These doctrines shift agent behavior from "clearing boards" to "managing relationships." Data integrity is no longer a byproduct of user diligence but a fundamental requirement of the system's architecture.

2. The Network: Fluid Identity and Role Management

The Network module acts as the system's foundation, serving as a "Relationship Memory" layer. To achieve a 1:1 ratio between humans and records, the system must employ rigorous Identity Resolution logic.

Identity Resolution & Normalization

The system shall generate a **Deterministic Person UID** (SHA1 hash) derived from a combination of email, phone, and source item_id to ensure stability across imports. Data normalization is a mandatory precursor to any record merge:

- **Emails:** Must be trimmed and converted to lowercase.
- **Phones:** Must be normalized to digits-only or E.164 format. Identity resolution follows a strict priority: (1) Deterministic UID, (2) Normalized Email, (3) Normalized Phone.

Role Hierarchy and Time-Bound Rules

Antigravity mandates that every contact is assigned a role that is valid only for a specific duration.

Role Type	Triggering Event	Time-Bound Rules (Logic)
Buyer (Lead)	Creation of a Lead record representing buying intent.	**Effective From:** Lead creation date. **Effective To:** Date Lead is marked WON/LOST/Cancelled.
Seller (Inventory)	Listing of a property unit for sale.	**Effective From:** Listing start date. **Effective To:** Date unit is sold or withdrawn.
Client	**System-Triggered** upon a Deal being marked "WON".	**Effective From:** Deal closing date. **Effective To:** NULL (Permanent historical status).
Referral Partner	Sourcing a verified Lead for the business.	**Effective From:** Date of first referral creation. **Effective To:** NULL.
Collaborator	Active participation in a Deal as a strategic partner.	**Effective From:** Deal opening. **Effective To:** Deal closing/cancellation.

The "So What?" of Time-Based Roles

This architecture allows the business to track a single individual (e.g., "Holger") through a multi-year lifecycle. A user may appear as a **Buyer** in 2022, transition to a **Client** in 2023, act as a **Referral Partner** in 2024, and return as a **Buyer** (Lead) in 2025. By maintaining immutable history, the system provides a 360-degree view of lifetime value and relationship depth.

3. Lead Lifecycle: Defining Intent and Active Demand

The system distinguishes between **Leads** (Buyer intent) and **Inventory** (Seller intent). A Lead is an atomic instance of demand, while Inventory represents the supply-side mandate.

Operational Rules for "Active" Status

The "Active" status is a **computed boolean flag** derived from a materialized view. A contact is only "Active" if they emit one of the following signals:

1. **Ongoing Discussions:** The contact is linked to a Lead or Inventory record with an open status (e.g., "Negotiation" or "Under Offer").
2. **Open Requirements:** Active buyer preferences (Area, Budget, Property Type) are currently logged.
3. **Recent Activity:** A meaningful interaction (documented call, meeting, or viewing) has occurred within a **90-day window**.

Transition to Inactive

A contact shall be moved to an "Inactive" state via three specific triggers:

- **Deal Closure:** The associated Lead is successfully converted to a WON Deal.
- **Explicit Disqualification:** The lead is manually disqualified for lack of fit or budget.
- **Withdrawal/Dormancy:** The contact explicitly withdraws intent, or no meaningful signal is detected for 90 days. This strict logic prevents pipeline inflation, ensuring leadership views an honest representation of market demand rather than a bloated database.

4. Deal Confirmation: The "WON" Mandate and Client Evolution

Antigravity employs an outcome-based definition of success. Success is measured solely by actualized transactions.

The "WON Only" Mandate

Logic dictates that a **Deal** is a post-success entity. Any transaction attempt that results in a "Lost" or "Cancelled" outcome is reclassified as a **Closed Lead** and is never recorded as a Deal. This hard rule ensures that revenue reporting and performance metrics are untainted by negotiation volume or failed attempts.

Earned Client Status (System-Triggered)

"Client" is a title earned through transaction involvement. The system shall automatically trigger the "Client" status if the following conditions are met:
- The Contact is a confirmed participant in a Deal record.
- The Deal outcome is officially recorded as "WON".
- All financial closing data (Value, Date) is verified.**Important:** Client status is permanent and can coexist with other roles (e.g., a Client can also be an active Referral Partner).

System-Wide Consequences of a WON Deal

- **Revenue:** Recorded as actualized in the Deals module.
- **Inventory:** The atomic Unit is marked as "Sold," and active supply is reduced.
- **Network:** The Contact's Lifetime Value (LTV) is incremented, and "Client" status is cemented.

5. Area Hierarchy: Mapping the Physical Market Reality

The Area Hierarchy mirrors the Dubai Land Department (DLD) structure to ensure internal data is perfectly compatible with external market truth.

The 5-Level Hierarchy

1. **Zone (Business Layer):** User-defined grouping for agent management and accountability. **Rule:** Zones can be redefined without altering historical transaction data.
2. **Area (Market Layer):** DLD-recognized geographic boundary.
3. **Master Project:** Large umbrella development (e.g., "Dubai Hills Estate").
4. **Project:** Specific development phase or building.
5. **Unit:** The atomic, physical truth (the specific property).

Unit Identity and Property Types

A Unit exists independently of any deal or person. It acts as the anchor for all historical data. Every Unit **must** be classified as one of the four mandatory property types:
- **Villas**
- **Townhouses**
- **Apartments**

- **Plots** This hierarchy enables "Demand vs. Supply" matching by rolling up Buyer Lead preferences (demand) and comparing them against Unit-level Inventory (supply).

6. Ecosystem Integration: Mortgage, Developers, and External Agents

The **Universal Contact** rule dictates that partners are not separate entities; they are roles within the Network.

Ecosystem Roles

- **Mortgage Advisors:** Serve as primary sources for Buyer Leads.
- **Developer Agents:** Serve as primary sources for new Units and Inventory.
- **External Agents:** Participants in Deals who may earn commission shares.
- **Collaborators:** Strategic partners providing deal support.

Role Fluidity Logic

The system shall support "Role Fluidity." A Mortgage Advisor is a partner by default, but if they personally purchase a property, they hold the roles of "Mortgage Advisor," "Buyer" (Lead), and eventually "Client" (WON Deal) simultaneously. Their partner history remains intact, providing a 360-degree view of their contribution to the business.

7. Intelligence and Reporting: The Multi-Level Dashboard System

Dashboards must transform raw data into market intelligence. **All dashboards must support drill-down capabilities** , allowing leadership to move from a high-level Zone view down to the atomic Unit transaction history.

Primary Dashboards

- **Unit Dashboard:** Focuses on atomic appreciation, DLD history, and days on market.
- **Project Dashboard:** Focuses on absorption rates and property type splits (Villas vs. Townhouses vs. Apartments vs. Plots).
- **Master Project Dashboard:** Monitors Year-over-Year (YoY) growth and long-term development value.
- **Zone Dashboard:** Management view focusing on agent performance and the ratio of Active Demand (Leads) to Total Supply (Inventory).

Time-Based Analysis Requirement

All reporting must mandate Time-Based Analysis, insisting on YoY growth metrics and historical transaction volume comparisons to ensure market trends are accurately identified.

QA Checklist for Leadership

The system shall be audited against this checklist to ensure technical adherence to business logic:
- **Identity:** Is the deterministic UID generated via SHA1 of normalized email/phone/item_id?
- **Normalization:** Are emails trimmed/lowercase and phones digits-only/E.164?

- **Provenance:** Does every record have a link back to the source Monday board and item ID?
- **Classification:** Is every Unit assigned one of the four mandatory property types?
- **Success Logic:** Is the "WON Only" rule enforced, with Lost/Cancelled deals reclassified as Leads?
- **Status:** Is "Active" status being calculated as a boolean flag from a materialized view?
- **Integrity:** Are Zones treated as a business layer that does not corrupt the Market Layer history?This BRD ensures that the Antigravity system functions as a truthful, scalable, and relationship-centric platform, preserving the brokerage's institutional memory for the long term.