

Redline Simulator

Canon, Loop, and Architectural Constitution

This document is the single source of truth for the Redline Simulator project. It defines the purpose, learning philosophy, gameplay loop, architectural principles, and design constraints that govern all current and future development. All implementations, content, and extensions must conform to this canon.

1. What Redline Simulator Is

Redline Simulator is an interactive, turn-based educational simulation that teaches corporate finance, FP&A, and strategic decision-making through play, not passive instruction. The player assumes the role of a CFO navigating real organizational constraints. The game models consequence accumulation rather than problem solving.

2. The Canonical Loop

All Redline variants follow a single immutable progression loop:

Recruit → Strengthen HQ → Unlock Systems → Story Reacts

3. Recruit — Identify Value and Risk

Recruitment represents forming relationships with banks, vendors, customers, analysts, and internal allies. Each recruit introduces both upside and latent risk. Recruits persist across time and shape future outcomes.

4. Strengthen HQ — Fortify the Balance Sheet

HQ represents institutional strength: capital structure, liquidity, reporting rigor, and internal controls. Strengthening HQ reduces volatility, lowers cost of capital, and slows audit pressure accumulation.

5. Unlock Systems — Expand Financing and Information

Systems and tools are earned through missions and demonstrated understanding. Unlocks include financing instruments, analytical visibility, and strategic permissions.

6. Story Reacts — Capital Has Memory

The simulation world responds to accumulated decisions. Board scrutiny, analyst presence, trust, and audit risk evolve based on historical behavior. There is no reset state.

7. Time and Turn Structure

The simulation is turn-based. One turn equals one week. Every four turns, a mandatory month-end close occurs. Quarter-end and year-end events escalate stakes and scrutiny.

8. Player Actions

Universal actions are Look, Use, Talk, and Hack/Eavesdrop. Actions generate structured decision intents but never directly mutate business state.

9. Spatial Grammar

Navigation occurs via a top-down town map with distinct buildings. Buildings lead to interior, point-and-click scenes. Spatial structure is consistent across all Redline versions.

10. Missions and Victory

Missions arrive via in-game communication channels. All missions teach core financial concepts, advance progression, and award points. Victory is achieved by unlocking and executing the Exit Strategy.

11. Audit Pressure

Audit pressure accumulates through risky behavior and errors. At a defined threshold, the Audit subgame is triggered. Outcomes permanently affect future play.

12. Architectural Principles

The core engine is deterministic and data-driven. UI layers never mutate business state. All progression flows through the canonical loop. LLMs may generate narrative content but never control math or state.

13. Tone

Redline Simulator blends satirical corporate storytelling with rigorous financial realism. Discomfort, pressure, and consequence are intentional pedagogical tools.