

Agentic AI & Context Management Architecture

This section details the core innovation of the project: the **Context-Snoopi** architecture. This system manages the trade-off between the infinite depth of a novel and the finite constraints of the LLM context window.

The Problem: Why Standard RAG Fails for Narrative

Retrieval-Augmented Generation (RAG) is designed for fact retrieval, not causal narrative logic. A novel is a chain of events where "State" (who has what, who is where) matters more than semantic similarity.

CONTEXT ARCHITECTURE

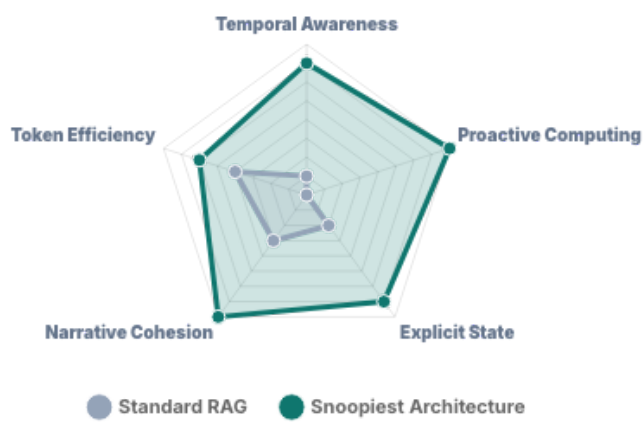
Standard RAG Approaches vs. The Snoopi Methodology

Architecture Profile

While standard Context Management treats data spatially (finding "nearby" vectors), **Snoopiest** treats data chronologically and structurally. This results in a massive shift towards explicit state management and temporal awareness.

STANDARD CODE RAG

CONTEXT-SNOOPIEST



PRIMARY MECHANISM

RAG & Sliding Window

Indexes vectors; retrieves based on similarity match.

Hierarchical Summarization

Maintains a recursive tree of narrative summaries (Level 1-3).

TEMPORAL AWARENESS

Low (Spatial)

Treats code/text as a dependency graph or proximity vector.

High (Chronological)

Treats text as a causal sequence (Cause → Effect → Outcome).

CONTEXT RETENTION

Reactive

Retrieves data only after a user query is made.

Proactive

Pre-computes context ("Backbone") before processing chunks.

STATE MANAGEMENT

Implicit

Relies on raw file content and git history diffs.

Explicit DB

Uses JSON "Character Sheets" & "Inventory" as state databases.

SUMMARIZATION STRATEGY

Compaction

Compresses history primarily to fit token limits.

Narrative Synthesis

Rewrites beats into higher-level abstractions preserving meaning.

HANDLING OVERFLOWS

Truncation

Drops oldest turns or summarizes purely by count.

Critical Locking

Drops non-essentials while "Locking" critical plot points.




GENERATED FOR SNOOPIEST ARCHITECTURAL DOCUMENTATION V1.0

The "Snoopiestic" Hierarchical Strategy

To solve the narrative decay problem, we implement a recursive, tree-structured memory system that ensures the agent never loses the "thread" of the story.

THE CONVEYOR BELT

Snoopiest Context Management Metaphor

CONTEXT BACKBONE (SHARED MEMORY)	
	assets/profiles/characters.json
	assets/profiles/locations.json
	Current_Story_State.index

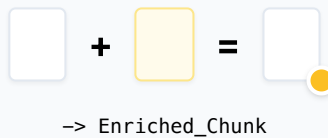
A

CONTEXT INJECTOR

The "Stapler"

Receives raw text chunk. Reaches into the cabinet to find matching **Character Profiles**.

ACTION:



B

THE DIRECTOR

Translation Bot

Reads the enriched chunk. Ignores narrative fluff. Writes technical **Camera Directives**.

OUTPUT:

```
{
  "shot": "Medium",
  "move": "Pan Right",
  "focus": "Scar"
}
```

Memory Keeper

Summarizes the chunk. Creates a new **Index Card** and files it back in the Cabinet.

UPDATE:

Context Window Optimized

● CONTEXT RETRIEVAL

● VIDEO GENERATION

● CONTEXT UPDATE

Memory Tier Breakdown

Level 0: The Working Window

The raw text of the current scene (approx. 2000 tokens). This is where the high-resolution action takes place.

Level 1: Scene Summaries

As a scene completes, it is compressed into a dense factual summary (50-100 words), capturing state changes rather than prose.

Level 2: Chapter Synthesis

Once a chapter is complete, Level 1 summaries are synthesized into a mid-term memory layer that removes transient details.

Level 3: The Narrative Backbone

The "Long-Term Memory" layer. A continuously updated document tracking global arcs across the entire 100,000+ word novel.

Proactive Context Management

Unlike systems that simply slide a window (dropping tokens by age), Context-Snoopiest utilizes **Semantic Retention**. The agent explicitly decides *what* to keep. If a vital plot point occurs on Page 1, it is "locked" into the Level 3 backbone for the duration of the project.