



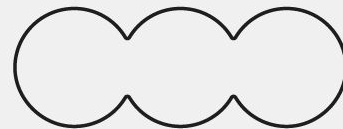
Google Developer Group  
Douglas

# Scaling Imagination

Orchestrating Gemini 3 Agents for Interactive Fiction

in .NET

Olorunfemi Davis

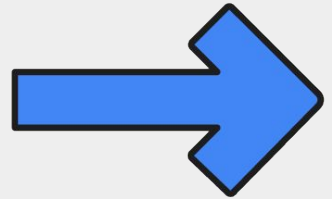


**{ Build  with AI }**

Chapter One

# Fiction

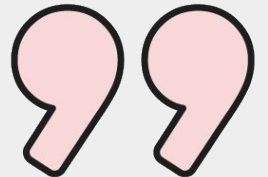
The art of imaginative storytelling





The universe is  
made of **stories**,  
not atoms.

- Muriel Rukeyser



# Fiction

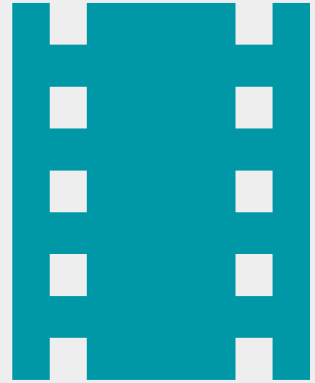
Games



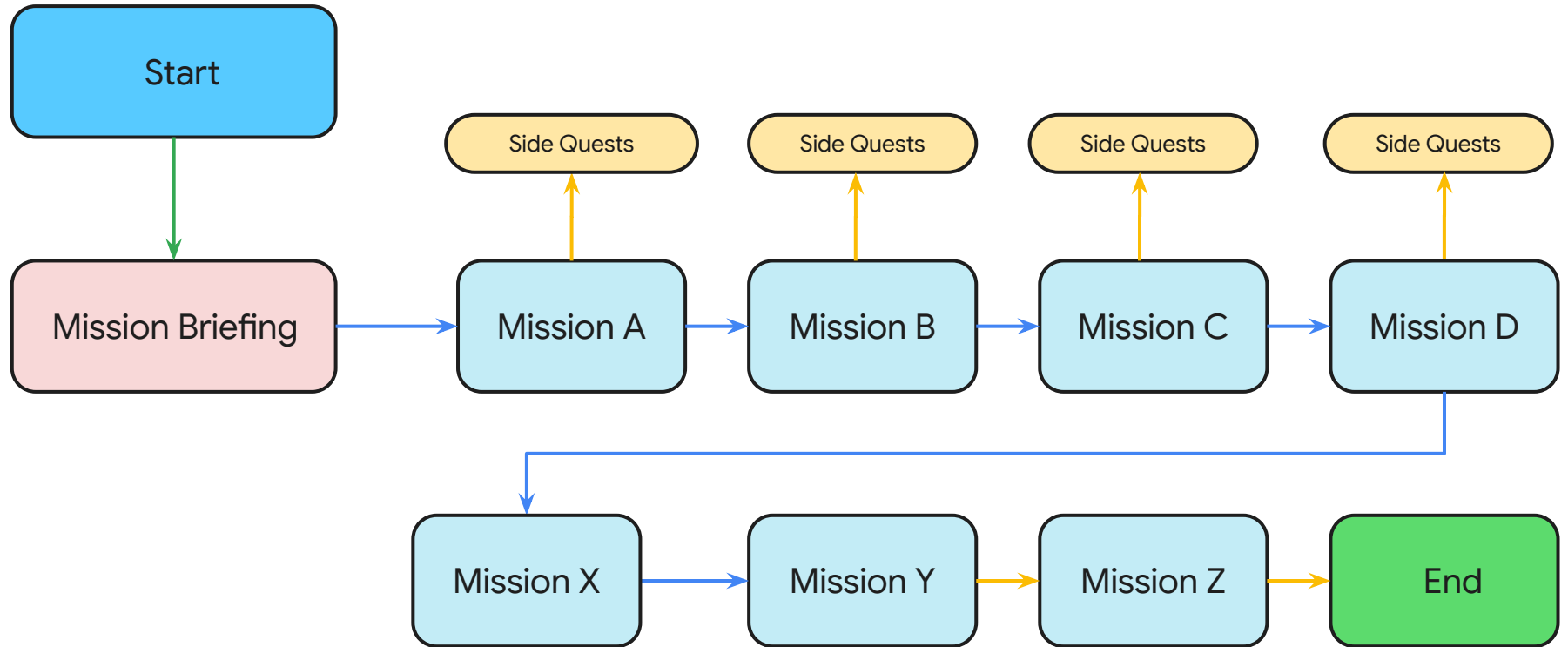
Books



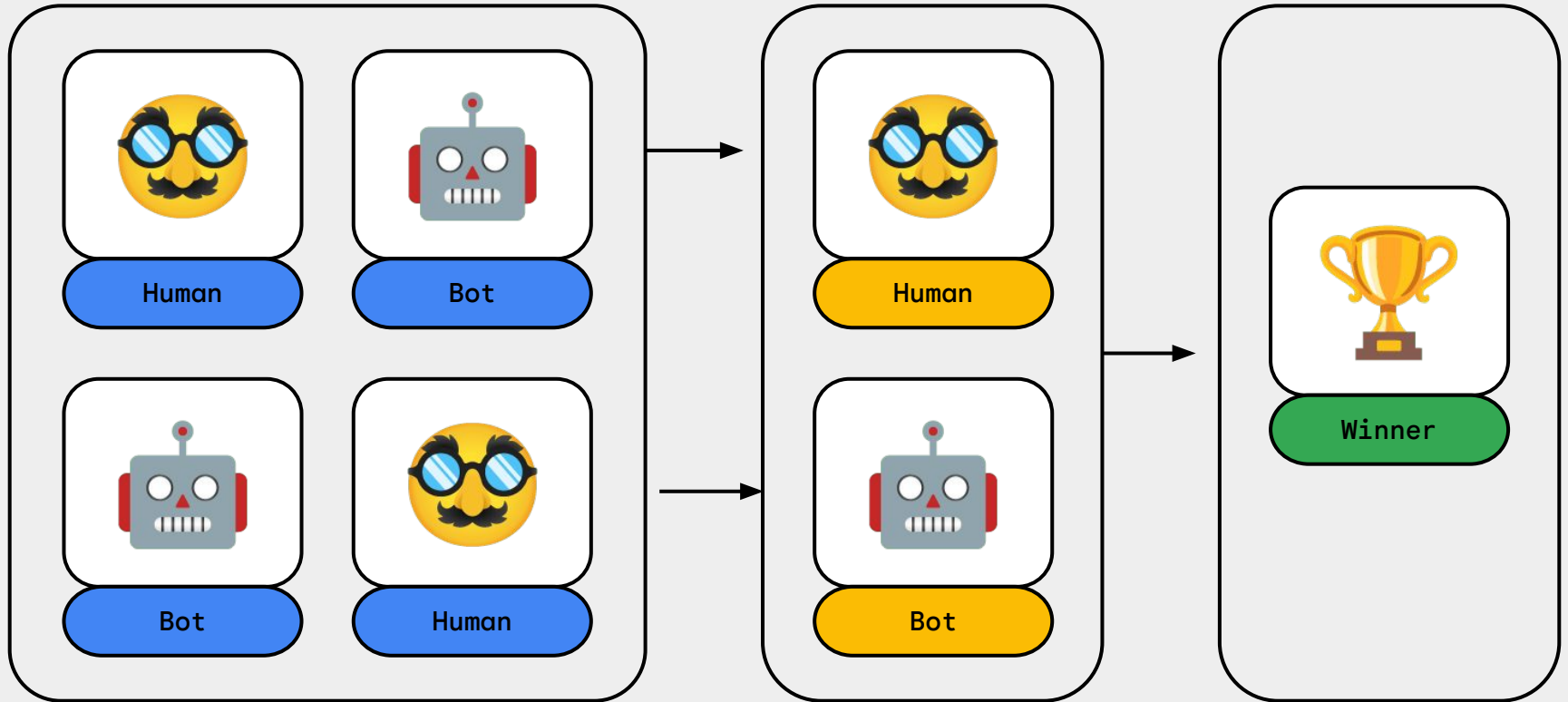
Movies



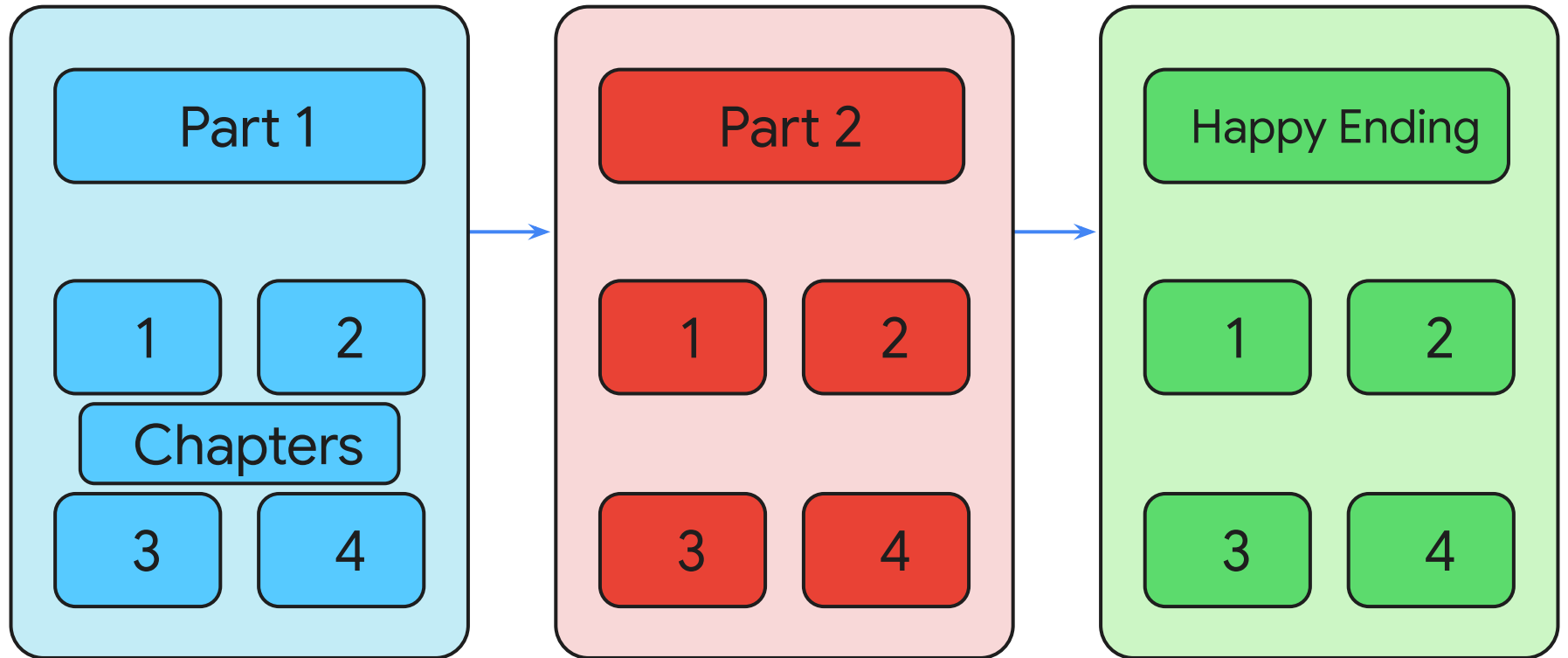
# FPS Game play flow



# Tournament Game play flow

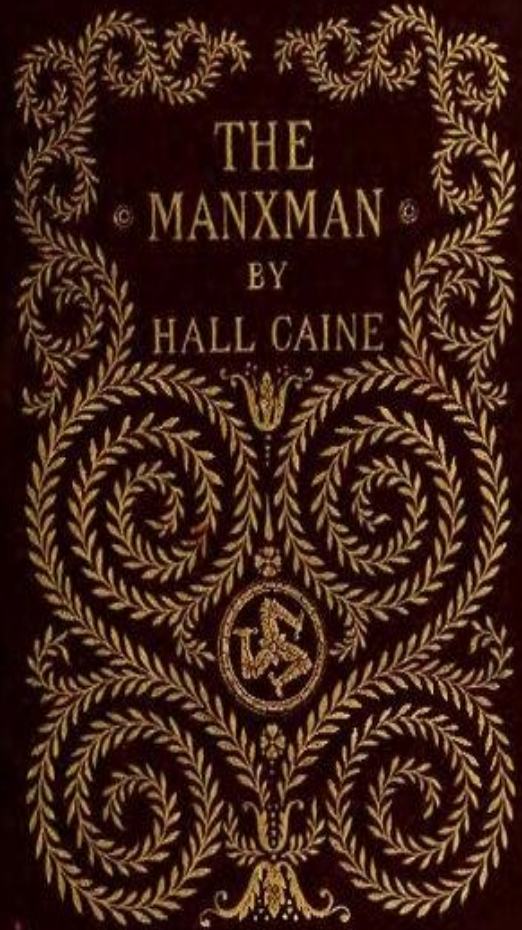


# Book reading flow



## Book flow

- **Part I: Love & Separation**
  - **Chapter 1: Pete & Kate**
  - Chapter 2
  - Chapter N
  
- **Part II: Temptation & Conflict**
  - **Chapter 1: Philip & Kate**
  - Chapter 2
  - Chapter N
  
- **Part III: Collapse & Consequence**
  - **Chapter 1: Revelation**
  - Chapter 2
  - Chapter N
  
- **Ending**
  - Emotional Aftermath



# Scaling Imagination

In a world of **Interactive Fiction**

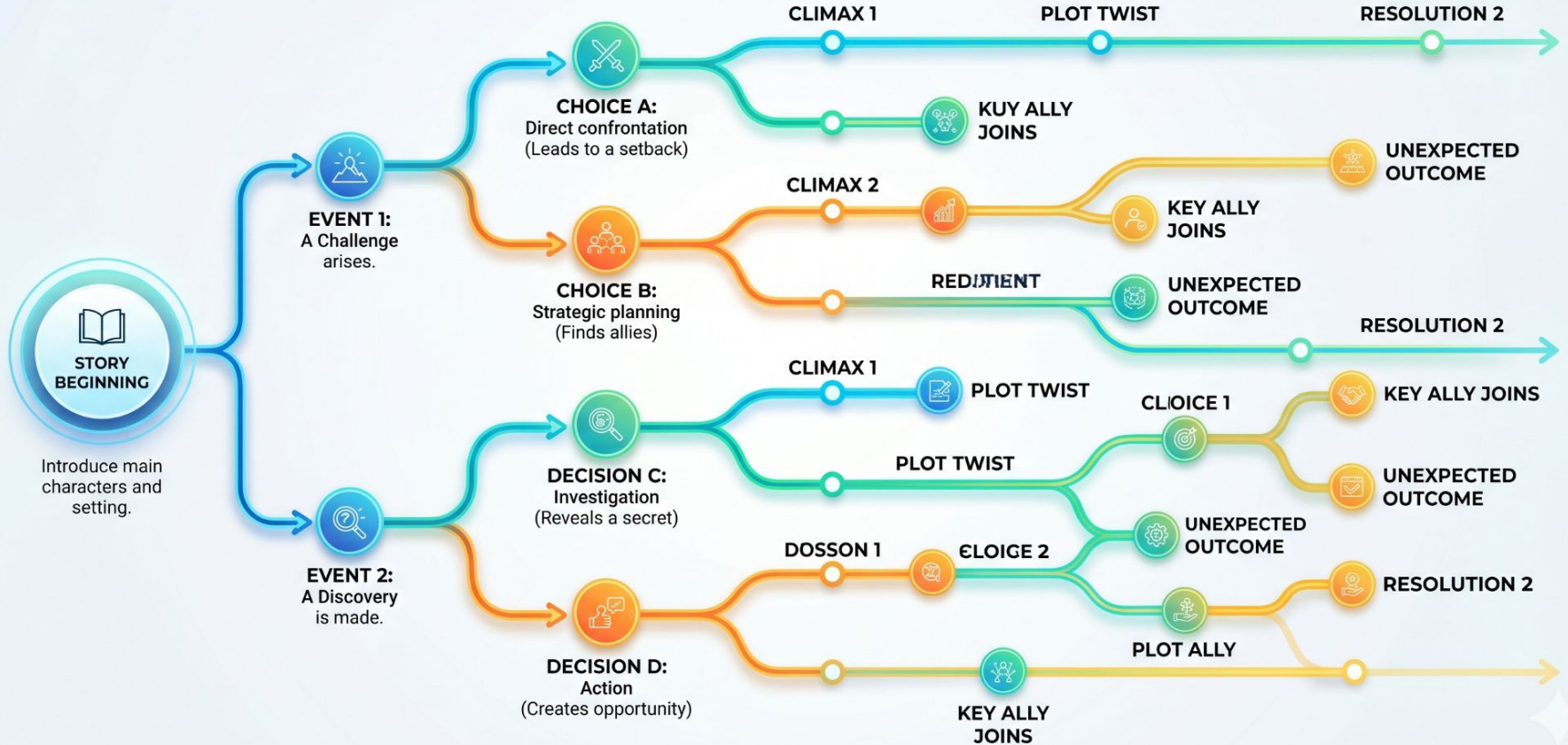


# In a world of Interactive Fiction

- 1 Choice-Driven: Every decision unspools a new reality.
- 2 Asset: Outcomes impact player rewards and losses.
- 3 Non-Linear: A publishing shift from prose to architecture.



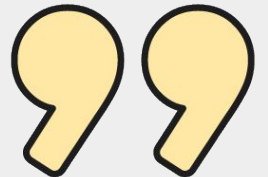
# THE STORY BRANCHING PATHWAY



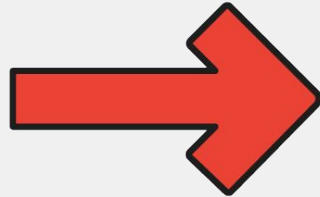


**Imagination is  
more important  
than **knowledge.****

- Albert Einstein

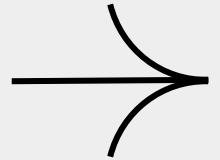
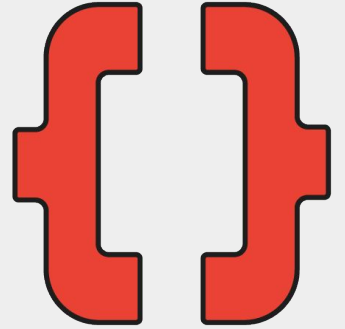


# The Core Challenge

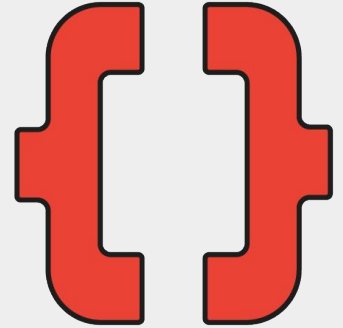


# The Complexity Explosion

In interactive fiction, complexity doesn't just grow—it explodes.



# The Complexity Explosion



## Coherence

Manual coherence maintenance is impossible at scale.

## Testing

Testing thousands of paths requires non-human speed.

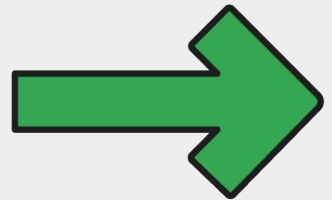
## Logic Loops

Logic loops and dead ends must be caught early.

Chapter Two

# Project CYA

Reimagining story-telling



# Introducing Project CYA

## Web App

Writers and Readers



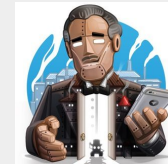
## Mobile App

Readers



## Bot App

Readers

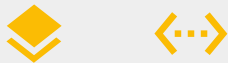


# Project CYA



## Intricate Webs

Authors craft deep choices where readers navigate entirely new story branches dynamically.



## Dynamic Assets

Decisions are weighted by assets like Life, Gold, and Ammo, creating a high-stakes mechanical layer.



## State Machines

Every story is compiled into a deterministic state machine managed by code.



# Reader experience

- Assets
- Stories
- Choices

## Simulate actual gameplay in real time

 Vitality - 16 |  Experience - 5 |  Mystery - 5 |  Treasure - 5

### Whispers of the Unspoken Truth

The air in your father's study remained thick with the scent of pipe tobacco and stale memories, a heavy shroud that seemed to sun filtering through the grime-streaked windows. It had been three days since the funeral, yet the house felt less like a home and more like a mausoleum of things left unsaid. You stand before the massive mahogany desk, its surface cluttered with the debris of a life lived in compartments—ledger books, fountain pens, and a stack of black-and-white photographs that no one was ever supposed to see.

Outside, the wind picks up, rattling the loose pane of the window, a sound like a skeletal hand seeking entry. You hear the floorboards in the hallway—the distinct, heavy tread of your brother, Elias. He has been searching for these same records, his eyes hollow with a desperate, burgeoning suspicion. If he finds you here, the fragile peace maintained since the wake will shatter. You hold the letter close, your pulse in your thumb thrumming against the parchment, as the shadow of your brother falls across the threshold of the open door.

Hide the envelope in your jacket and pretend to be organizing the ledger books.

Quickly hide the letter inside your coat and confront Elias with a calm facade.

 Mystery +2

Quickly hide the letter in your pocket and confront Elias about his suspicions.

Quickly hide the letter in your jacket and confront Elias with a calm facade.

 Mystery +2

Edit

# Writer experience

- Assets
- Stories
- Choices

## < The Final Journey 3

Basic Preface Cover **Editor** Preview Publish

Book Type: **Interactive Book**

### Configuration

Add up to 4 assets to configure your interactive book

Add New Asset +

4 of 4 Assets

: Vitality ▾ 🔄 ▾ - 16 +

: Experience ▾ 📧 ▾ - 5 +

: Mystery ▾ 🔍 ▾ - 5 +

: Treasure ▾ 💎 ▾ - 5 +

💡 Tip: Drag and drop assets to reorder them

 Generate Assets

# Project CYA + Gemini



## Authoring Assistant

Helps human writers expand branches while maintaining style consistency.



## The QA Agent

Actively tries to "break" the story logic, searching for soft-locks and dead ends.



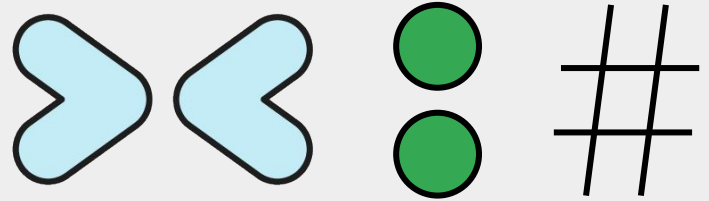
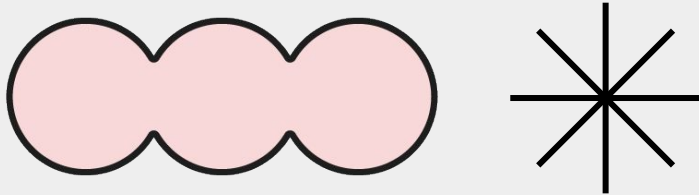
## The Orchestrator

Agent Framework coordinates the handoff between Creation and Testing.

# Why Leverage AI Agents?

## Simulated Writers

Agents generate coherent narrative branches based on strict state preconditions and tone guidelines provided by authors.



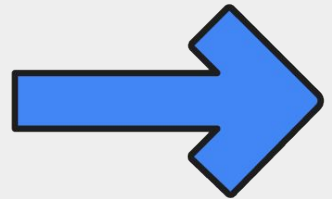
## Simulated Readers

AI "plays" through every possible branch to identify logical gaps, pacing issues, and impossible difficulty spikes.

Chapter Three

# Technical Architecture

Orchestrating .NET, Gemini 3, and the Microsoft Agent Framework.



# Technical Components

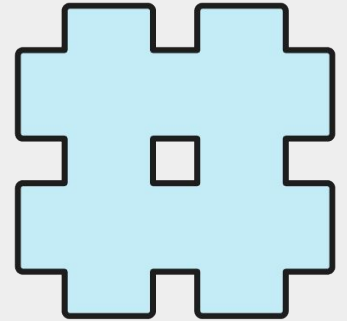
- 1 The State Architect via Semantic Kernel and Gemini
- 2 Agent Handoff Orchestration via Microsoft Agent Framework
- 3 Asset Calibration via MCP
- 4 Content Generation via Gemini
- 5 Agents via Gemini



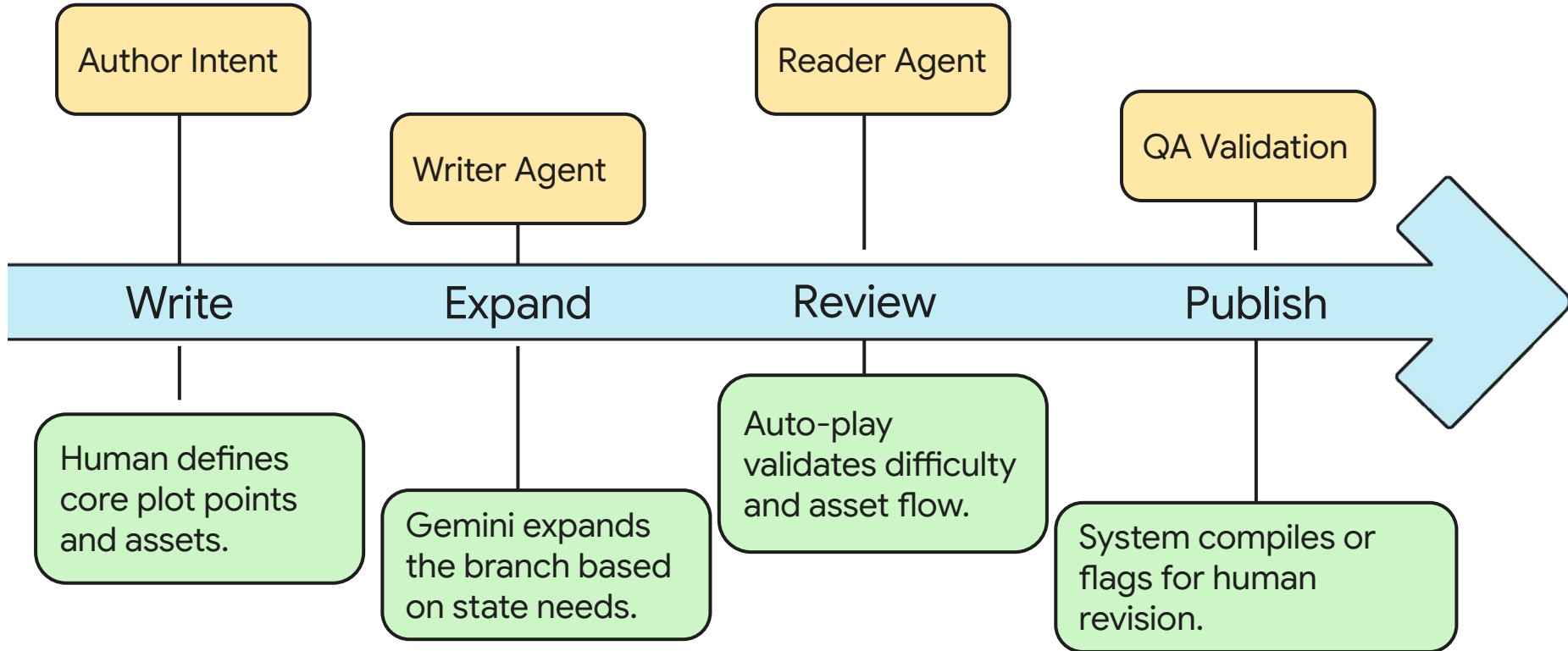
# The State Architect

Via Semantic Kernel Google Connector Integration

- **Semantic Kernel:** Bridging natural language and logic.
- **Structured Output:** Gemini generates state-aware JSON/C# schemas.
- **Valid Logic:** Ensuring story data is consistent and "solvable."



# Agent Handoff Orchestration



# Asset Calibration via MCP

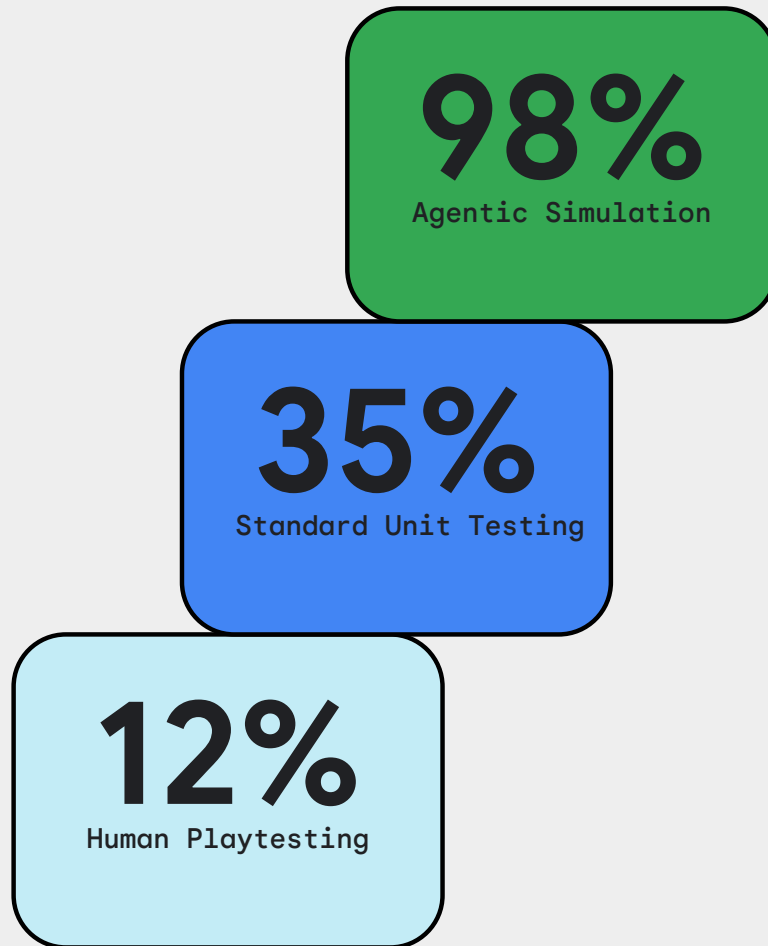
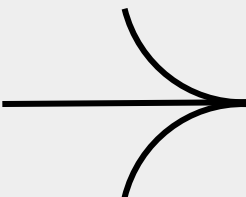
## Connecting to the Rules Engine

- Identifies nodes where readers run out of Life too early.
- Suggests where to prune dead-end branches.
- Maps narrative tension to asset scarcity.



# Testing Coverage Comparison

Agentic simulation identifies asset bottlenecks and dead ends with near-total coverage.



Scale of the New Fiction

**10k**

Simulated Branches

Any Questions?



**Q&A**

Find Me

