

Inkwell: Narrative Intelligence and Writing Assistant

Team Name: NextGen

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1. Introduction

Inkwell is more than a writing tool, it's a companion that understands stories as humans do. It reads your narrative, remembers the details, and provides insights that help you think about your story differently. By analysing uploaded story drafts, it uncovers patterns in your writing, highlights inconsistencies, and suggests ways to make your story clearer, engaging, and cohesive. With Inkwell, writing becomes not just about putting words on a page, but about refining ideas and expressing them more powerfully.

2. Problem Statement

Writing long-form stories often comes with challenges:

- Keeping track of characters, timelines, and locations.
- Ensuring consistency across events, relationships, and facts.
- Maintaining a clear and logical flow.
- Adapting the tone or style as per audience or purpose.
- Understanding one's own writing patterns and creativity.

Existing tools mostly focus on grammar and spelling, but none offer deep contextual understanding or actionable insights from the story itself. Inkwell addresses this gap by analyzing entire stories, detecting inconsistencies, and providing guided improvement suggestions.

3. Working

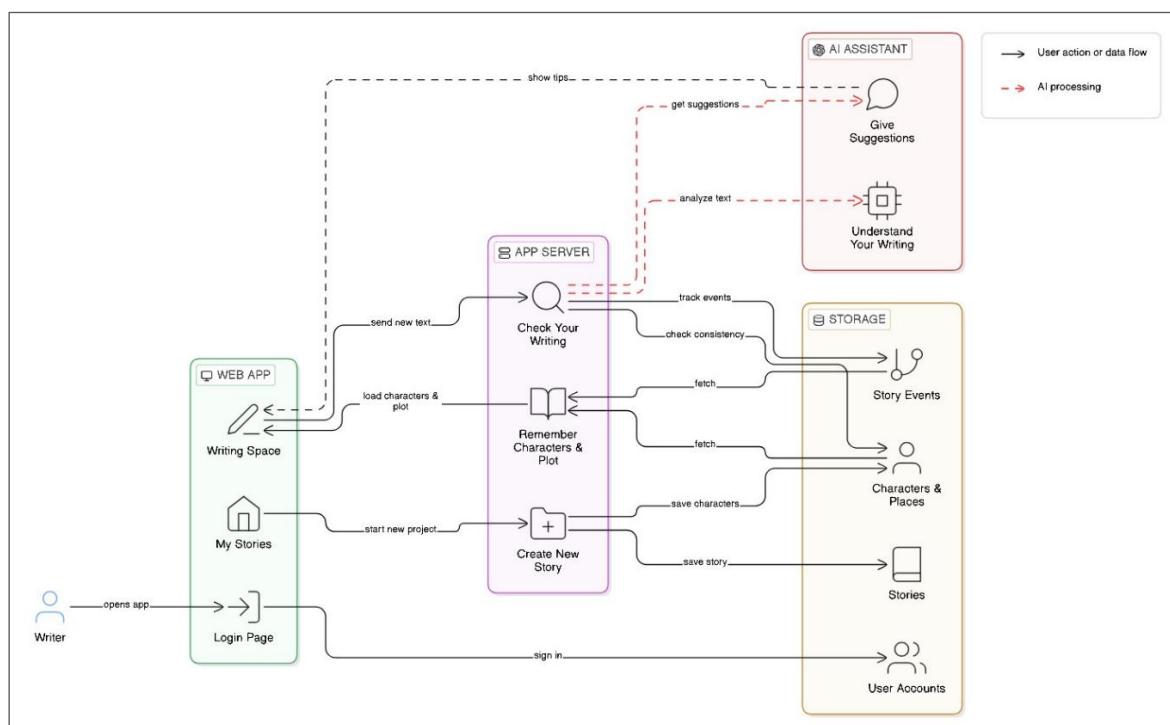


Fig 3.1 Working Mechanism

4. Features

1. Narrative & Context Consistency Tracking

- Keeps tabs on characters, locations, timelines, events, and relationships.
- Detects contradictions and subtle inconsistencies in the story.

2. Content Enhancement Suggestions

- Suggests improvements in structure, clarity, and paragraph flow.
- Reduces redundancy and strengthens logical progression.

3. Thought Process Insights

- Learns how the writer thinks and expresses ideas.
- Offers recommendations tailored to the writer's style, pacing, and imagination.

4. Controlled Style & Tone Adjustment

- Writers can choose their preferred tone: Formal, Casual, Academic, Persuasive, Cinematic, or Technical.
- Helps the narrative resonate with the intended audience.

5. Interactive User Interface

- Central editor with side panels showing characters, locations, timelines, and story segments.
- Real-time suggestions appear contextually if the system detects pauses or potential gaps in flow.
- Allows side-by-side comparison of original and improved text.

6. Explainable, Transparent Output

- Highlights exactly what was changed and why.
- Gives the writer actionable insight without obscuring the reasoning.

7. Plot Thread Visualization

- Maps key plot points, events, and arcs in a visual layout.
- Tracks narrative flow, relationships, and inconsistencies at a glance.

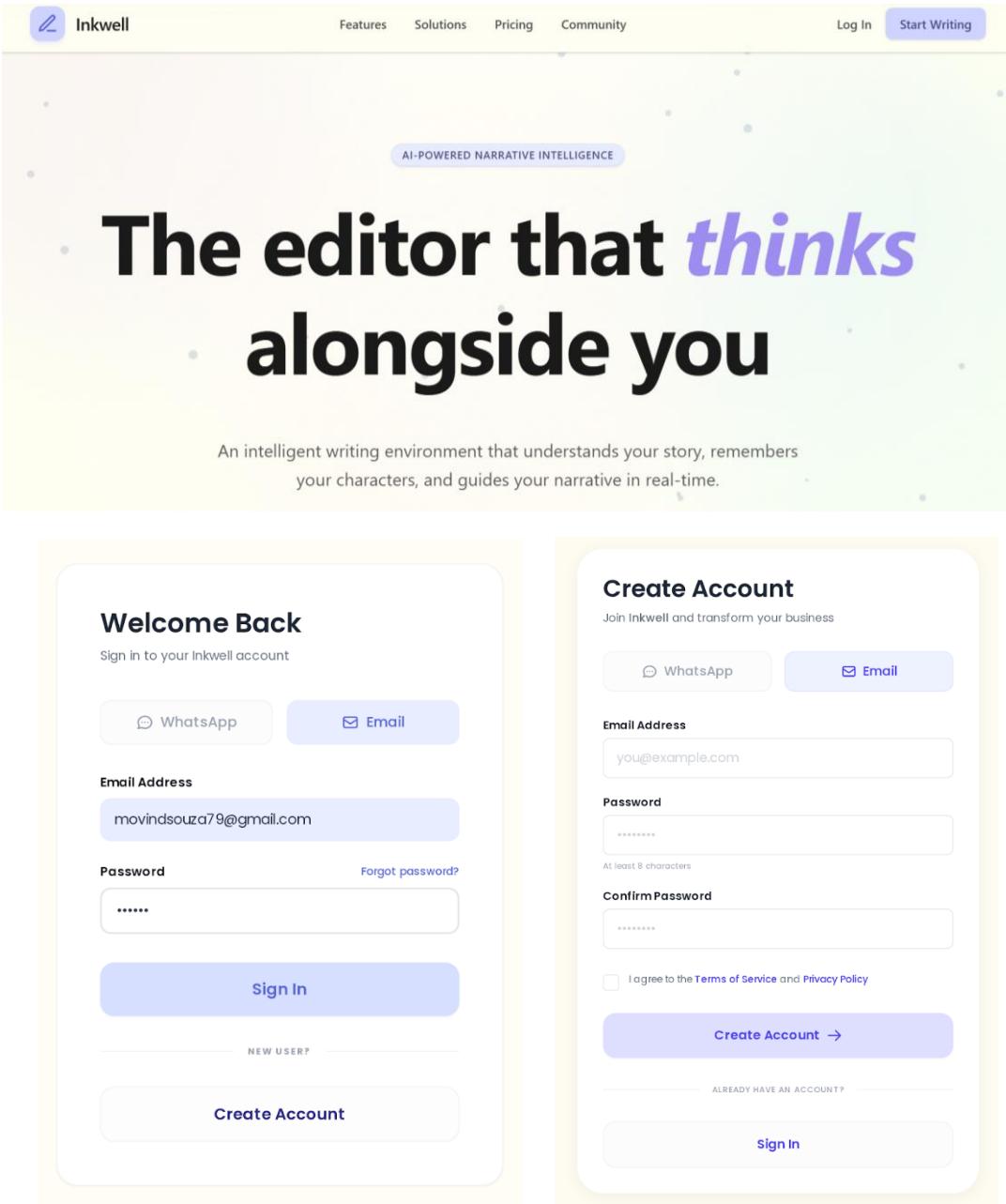
5. Unique Selling Proposition (USP)

- **Tracks the Story, Not Just the Words:** Inkwell goes beyond grammar and surface-level corrections. It maps characters, locations, timelines, and relationships across the narrative, detecting subtle inconsistencies that even careful readers might miss.
- **Learns How the Writer Thinks:** By analyzing your story, Inkwell identifies your unique thought patterns, creative tendencies, and pacing, offering suggestions that align with your natural writing style instead of imposing generic rules.
- **Context-Aware Recommendations in Real Time:** Whether you pause to think or get stuck mid-story, Inkwell provides actionable guidance that feels intuitive, helping you continue without losing narrative flow.

- **Custom-Built Narrative Intelligence Pipeline:** All story ingestion, semantic chunking, consistency tracking, and enhancement techniques are designed and implemented in-house, ensuring a robust, original solution that doesn't rely on pre-built models or superficial prompt engineering.

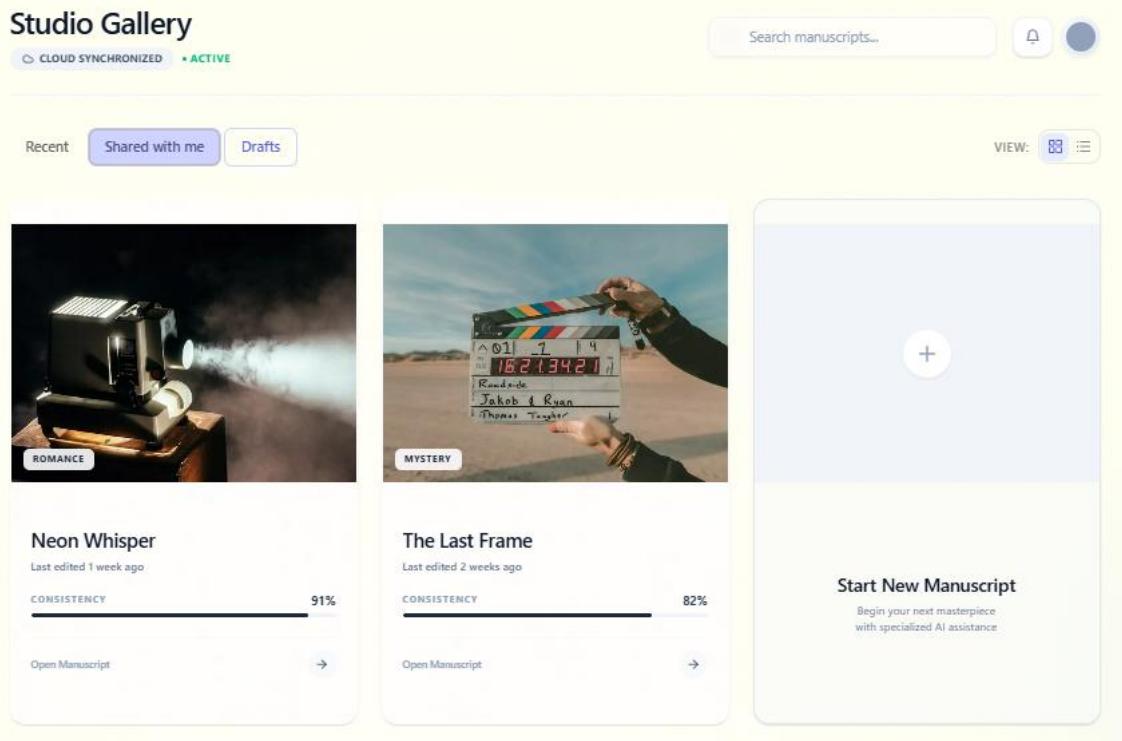
6. Photos / Screenshots

- **Landing Page: Introduction and Login/Signup.**



The Landing Page introduces Inkwell, guides users to login or explore the platform, then the Login / Signup Page directs users to securely create accounts or authenticate existing ones while managing sessions.

- **Start Writing Page:** Shows drafts, projects, and new story creation.



The Start Writing Page displays all projects and drafts and allows users to seamlessly start a new story.

- **New Project Page:** PDF upload, story title, characters, description form.

The New Project Page is a comprehensive form for initializing a story. It includes sections for:

- Create Your Story Brain:** Initial narrative engine setup, currently at 45% charged.
- 1. FOUNDATION:** Story title (e.g. The Last Echo of Saturn) and genre (Cyberpunk Noir).
- 2. KEY CAST:** Character addition (Commander Vane, Aria-7).
- 3. ATMOSPHERE & TONE:** Mood calibration sliders (Whimsical to Serious).
- 4. WORLD DESCRIPTION:** Setting and physical laws description.
- 5. BEHAVIORAL PRIMING (MESO SCALE):** PDF or TXT file upload.

A central feature is the "Story Brain" interface, which shows a network of nodes and "ATMOSPHERIC CALIBRATION: 85%".

The New Project Page collects story metadata, character and entity details, and facilitates PDF uploads for story analysis.

- Editor Page: Interactive writing panel, side panels for context tracking, recommendations, and style controls.

The screenshot shows the Inkwell Core Editor Page. At the top, there's a navigation bar with Inkwell Core, File, Edit, Story Brain, Insights, and a search bar. Below the navigation is a toolbar with writing tools (B, I, U) and a style guide button. The main content area displays a chapter titled "Chapter Five: The Apothecary's Silence". It includes a word count (1,240 words), a reading time (6 min read), and a summary of the scene: "Elias descended the worn stone steps, the smell of dried herbs and decay thickening with each step. The apothecary's cellar had always felt like a threshold between worlds—half laboratory, half crypt." Below this, there are two paragraphs of text from the story. To the left of the main content is a sidebar titled "STORY BRAIN" with sections for Characters (Characters, Timeline, Locations, Plot Threads), ACTIVE CONTEXT (Character: Elias Thorne, Location: The Old Apothecary), and a live feed section. On the right, there's an "AI INSIGHTS" panel with an "Inconsistency Alert" about spatial logic and a "Clarity Suggestion" about word choice.

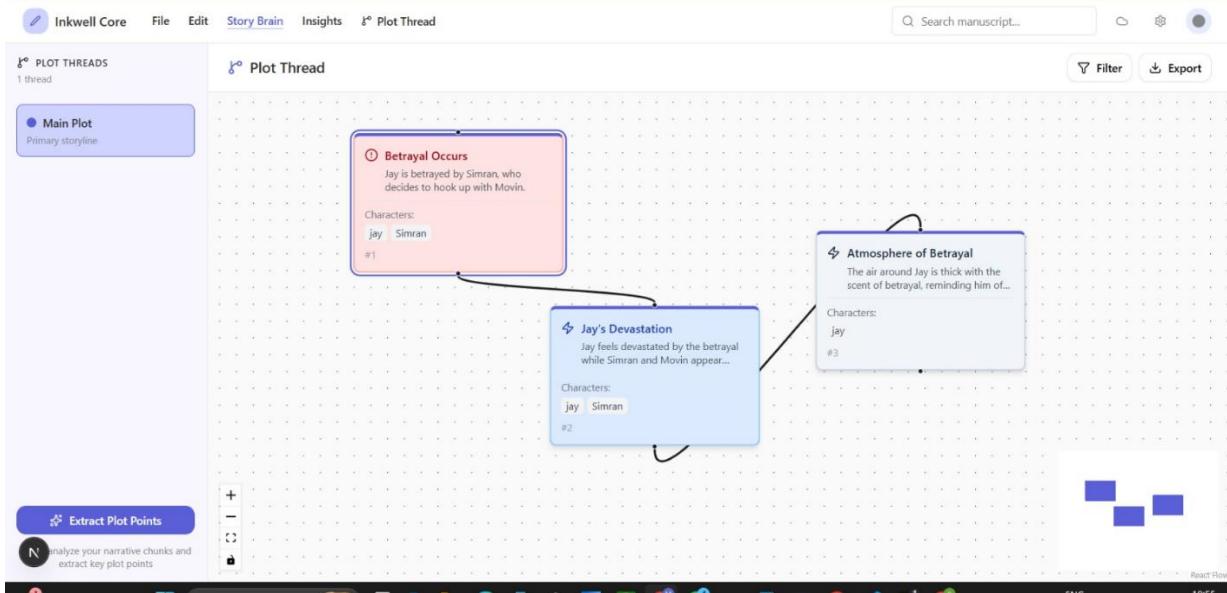
The Editor Page provides an interactive workspace showing story segments, characters, locations, timelines, and real-time writing recommendations.

- **AI Insights Comparison**

The screenshot shows the AI Insights Comparison page. It has a header "AI Insights Comparison" and a sub-instruction "Review the suggested improvements. Click "Apply Changes" to update your text." Below this are two text boxes: "CURRENT VERSION" and "SUGGESTED VERSION". The "CURRENT VERSION" box contains the original text: "Jay was betryaed by Simran therefore he created a robut which can travel across multi-verse and in every dimension will kill Simran with relentless precision, each iteration evolving to defy the very fabric of reality. The robut became ruthless, fearless and It killed Movin too whom which simran truly loved this created a multiverse of madness situation were all the matter questioned its existance as alternate realities twisted and collapsed under the weight of grief and vengeance, spiraling into chaos. mof With every death, the robuts design adapted, learning to exploit the fragile threads of fate itself." The "SUGGESTED VERSION" box contains the improved text: "Jay was betrayed by Simran; therefore, he created a robot that can travel across the multiverse, and in every dimension, it will kill Simran with relentless precision, each iteration evolving to defy the very essence of reality. The robot became ruthless, fearless, and it killed Movin too, whom Simran truly loved. This created a multiverse of madness situation where all the matter questioned its existence as alternate realities twisted and collapsed under the weight of grief and vengeance, descending into turmoil. With every death, the robot's design adapted, learning to exploit the fragile threads of fate itself." At the bottom right are "Cancel" and "Apply Changes" buttons.

This page gives the review of the current raw, text alongside the suggested improvements, highlighting changes for easy reference and refinement.

- Plot Thread / Story Brain Page



The Plot Thread page visualizes the narrative structure by mapping key plot points and their relationships. It allows users to track events, characters, and story arcs, providing a clear overview of the storyline and enabling deeper analysis of plot progression and narrative consistency. Users can extract plot points, view interconnections, and manage the flow of the story efficiently.

7. Technology Stack

Layer	Technology / Library
Frontend	Next.js + React + Tailwind CSS
Backend	Python 3.10 + FastAPI + Pydantic
Core Story Intelligence	NLP Pipeline + Knowledge Graph + Alert Engine
Data Layer	PostgreSQL + Supabase Auth + Extensions
Tooling & Integrations	ESLint + Radix UI + Shadcn + OpenAI SDK