StoryWeaver Spec Sheet

The Problem

StoryWeaver is a pioneering collaborative fiction platform that harnesses real-time multi-user editing, AI-powered narrative generation, and interactive story-branching. Designed for writers who thrive on collaboration and readers seeking immersive storytelling, StoryWeaver seamlessly blends community creativity with structured authorial control. Empowering users with intuitive co-authoring tools, AI-driven creative assistance, and reader-influenced story evolution, StoryWeaver provides a vibrant and dynamic environment for crafting, exploring, and personalizing narratives, making it the ultimate destination for casual and dedicated storytellers alike.

Key Features

- Real-Time Collaborative Writing Environment: Enables multiple users to edit stories simultaneously, fostering seamless teamwork.
- AI-Driven Content Generation and Assistance: Provides AI-powered tools to generate narrative ideas, characters, or full story segments.
- Interactive Narrative Branching System: Allows readers to influence story paths, creating immersive, choice-driven experiences.
- Comprehensive Story Organization and Management: Offers tools for writers to organize chapters, set permissions, and maintain control over collaborative contributions.
- Reader Engagement and Social Interaction Tools: Includes features like bookmarking, favoriting, liking, commenting, and connecting with a storytelling community.

Business Requirements

Noun, Verb

- Collaborative Story Management
    - Users (noun) can create (verb) new stories (noun) with titles (noun) and synopses (noun) to begin their creative work.
    - Users (noun) can edit (verb) their existing stories (noun) with basic text formatting to develop their content (noun).
    - Users (noun) can organize (verb) their stories (noun) into simple chapters (noun) so readers (noun) can navigate (verb) them easily.
- Real-Time Collaborative Writing Environment
    - Collaborators (noun) can edit (verb) a story (noun) simultaneously with other writers (noun) to collaborate (verb) efficiently.
    - Collaborators (noun) can see (verb) which sections (noun) others are currently editing (verb) to avoid (verb) conflicts.
    - Collaborators (noun) can comment (verb) on the story (noun) with simple comments (noun) to provide (verb) feedback (noun).
- AI-Powered Narrative Assistance
    - Writers (noun) can create (verb) prompts (noun) for AI-generated content (noun) together with their fellow collaborators (noun) to assist (verb) with story development (noun).
    - Real-time collaborators (noun) can approve (verb) prompts (noun) before they are submitted (verb) to ensure they understand (verb) the intent (noun) of their collaborators (noun).
    - Collaborators (noun) can approve (verb) or reject (verb) AI-generated content (noun) before it is added to maintain (verb) quality (noun).
- Interactive Narrative Branching

    - Readers (noun) can fork (verb) a story (noun) to create (verb) their own version (noun) so they can explore (verb) alternative narratives (noun).
    - Users (noun) can navigate (verb) between different branches (noun) of a story (noun) to experience (verb) alternative storylines (noun).
- User Management & Permissions
    - Users (noun) can create (verb) a basic profile (noun) with a username (noun) and profile picture (noun) so others can identify (verb) them in the collaborative environment.
    - Story owners (noun) can set (verb) stories (noun) as public, friends-only, or private to control (verb) access (noun) to their work (noun).
    - Story owners (noun) can grant (verb) basic permissions (noun) (view, comment, edit, fork) to other users (noun) to manage (verb) collaboration (noun).
- Reader Engagement Tools
    - Readers (noun) can favorite (verb) stories (noun) or bookmark (verb) specific parts so they can easily return (verb) to them later.
    - Readers (noun) can like (verb) stories (noun) to show appreciation (verb) for the author's work (noun).
- Technical Essentials
    - Writers (noun) want their work (noun) to be automatically saved (verb) so they don't lose (verb) their creative efforts.

Extracted Nouns

- Users
- Stories
- Titles
- Synopses
- Content

- Chapters
- Readers
- Collaborators
- Writers
- Sections
- Comments
- Feedback
- Prompts
- AI-generated content
- Story development
- Intent
- Quality
- Version
- Narratives
- Branches
- Storylines
- Profile
- Username
- Profile picture
- Story owners
- Permissions (view, comment, edit, fork)
- Access
- Work
- Collaboration
- Favorites
- Bookmarks
- Likes

Extracted Verbs

- Create
- Edit
- Organize
- Navigate
- Collaborate
- See
- Avoid
- Comment
- Provide
- Assist
- Approve
- Submit
- Understand
- Reject
- Maintain
- Fork
- Explore
- Experience
- Identify
- Set
- Control
- Grant
- Manage
- Bookmark
- Return
- Like

- Show appreciation
- Saved
- Lose

Target Audience

- Aspiring and Professional Writers
- Interactive Fiction Enthusiasts
- Creative Collaborators
- Story-Driven Community Members

Rules

- A story must have a title and at least one chapter to be made public.
- Only users invited by the story owner can edit the story.
- AI-generated content must be approved by the story owner before being added to the story.
- Stories can only be forked if the story owner has granted forking permissions.
- Users must be at least 13 years old to create an account.
- Comments on stories are only visible to the story owner and collaborators.

Challenge Questions

- How would you implement version control to allow users to track and revert to previous iterations of their stories, especially in a real-time collaborative environment?
- What mechanisms would you use to ensure AI-generated content is contextually appropriate and aligns with the story's tone and direction?
- How would you design the user interface to help readers navigate and explore multiple narrative branches without becoming overwhelmed or losing track of the main storyline?

- What strategies would you employ to foster a positive and constructive community, particularly in managing comments and feedback on collaborative stories?
- How would you address intellectual property and ownership concerns in a platform where multiple users and AI contribute to a single story?

Key Classification Dimensions Ranking

1. Creative Approach: Ranges from AI-Assisted (prefers to use AI for generating significant portions of the story) to Manual (prefers to write most of the content themselves with minimal AI input).
2. Collaboration Style: Spans from Independent (works mostly solo, may share stories but doesn't actively seek co-writers) to Team-Oriented (actively seeks out writing partners and enjoys collaborative storytelling).
3. Narrative Exploration: Moves from Single-Path (focuses on creating or following a linear storyline) to Multi-Path (enjoys creating or exploring stories with multiple branching narratives).
4. Technical Proficiency: Covers from Beginner (new to AI tools and collaborative writing platforms, may need guidance) to Advanced (comfortable with complex features, real-time editing, and AI integrations).
5. Technical Proficiency: Covers from Beginner (new to AI tools and collaborative writing platforms, may need guidance) to Advanced (comfortable with complex features, real-time editing, and AI integrations).

User Personas

1. Persona 1: Lily – The Guided Storyteller
    - Creative Approach: AI-Assisted (relies on AI for plot ideas and character development)
    - Collaboration Style: Independent (prefers to work alone initially)
    - Narrative Exploration: Single-Path (focuses on linear stories)
    - Technical Proficiency: Beginner (needs intuitive interfaces and clear instructions)
    - Writing Goals: Hobbyist (writes for personal enjoyment)
    - Profile & Backstory:
        - Age: 25, recent college graduate exploring creative outlets.
        - Found StoryWeaver through a writing subreddit.
    - Enjoys the idea of AI helping with writer's block.
    - Behavior & Motivation:
        - Uses AI to generate story prompts and character descriptions.
        - Writes short, linear stories to practice storytelling basics.
        - Occasionally shares completed stories with close friends for feedback.
    - Reason to Use StoryWeaver:
        - Appreciates the AI's ability to spark creativity and overcome creative blocks.
        - Values the platform's ease of use and beginner-friendly design.
2. Persona 2: Alex – The Collaborative Wordsmith
    - Creative Approach: Manual (prefers to write most content themselves)
    - Collaboration Style: Team-Oriented (actively seeks writing partners)
    - Narrative Exploration: Multi-Path (enjoys creating branching narratives)
    - Technical Proficiency: Intermediate (comfortable with platform features)

- Writing Goals: Aspiring Author (aims to create polished stories)
- Profile & Backstory:
    - Age: 32, freelance writer looking to expand their portfolio.
    - Discovered StoryWeaver through a writing workshop.
    - Enjoys the challenge and dynamics of collaborative storytelling.
- Behavior & Motivation:
    - Initiates and joins collaborative writing projects with others.
    - Uses the platform's branching features to craft interactive, multi-path stories.
    - Provides constructive feedback to collaborators to refine narratives.
- Reason to Use StoryWeaver:
    - Values the opportunity to work with other talented writers and learn from them.
    - Appreciates the platform's tools for managing complex, branching narratives.
- Persona 3: Rowan – The Tech-Savvy Innovator
- Creative Approach: AI-Assisted (uses AI for experimental storytelling)
- Collaboration Style: Team-Oriented (enjoys group projects)
- Narrative Exploration: Multi-Path (creates complex, branching stories)
- Technical Proficiency: Advanced (explores all platform features)
- Writing Goals: Hobbyist (experiments for fun)
- Profile & Backstory:
    - Age: 28, software developer with a passion for storytelling.
    - Found StoryWeaver through a tech blog highlighting AI creativity tools.
    - Intrigued by the intersection of technology and narrative arts.
- Behavior & Motivation:

        - Experiments with AI-generated content to create unconventional stories.
        - Collaborates on avant-garde group projects that push creative boundaries.
        - Explores the platform's technical limits to innovate storytelling techniques.
    - Reason to Use StoryWeaver:
        - Enjoys the technical challenge of blending AI with human creativity.
        - Values the platform's flexibility for experimental and collaborative projects.
3. Persona 4: Mia – The Avid Story Explorer
    - Creative Approach: N/A (primarily a reader rather than a writer)
    - Collaboration Style: Independent (enjoys solo exploration of stories)
    - Narrative Exploration: Multi-Path (loves exploring different story branches)
    - Technical Proficiency: Beginner to Intermediate (comfortable navigating the platform)
    - Writing Goals: N/A (focused on reading and experiencing stories)
    - Profile & Backstory:
        - Age: 40, avid reader seeking interactive fiction experiences.
        - Discovered StoryWeaver through a book club recommendation.
        - Enjoys the immersive nature of branching narratives.
    - Behavior & Motivation:
        - Spends hours exploring different story paths and outcomes.
        - Leaves thoughtful comments on stories they enjoy to engage with writers.
        - Occasionally suggests story ideas or continuations to authors.
    - Reason to Use StoryWeaver:
        - Appreciates the variety and interactivity of the platform's stories.

- Values the ability to influence story outcomes through choices as a reader.

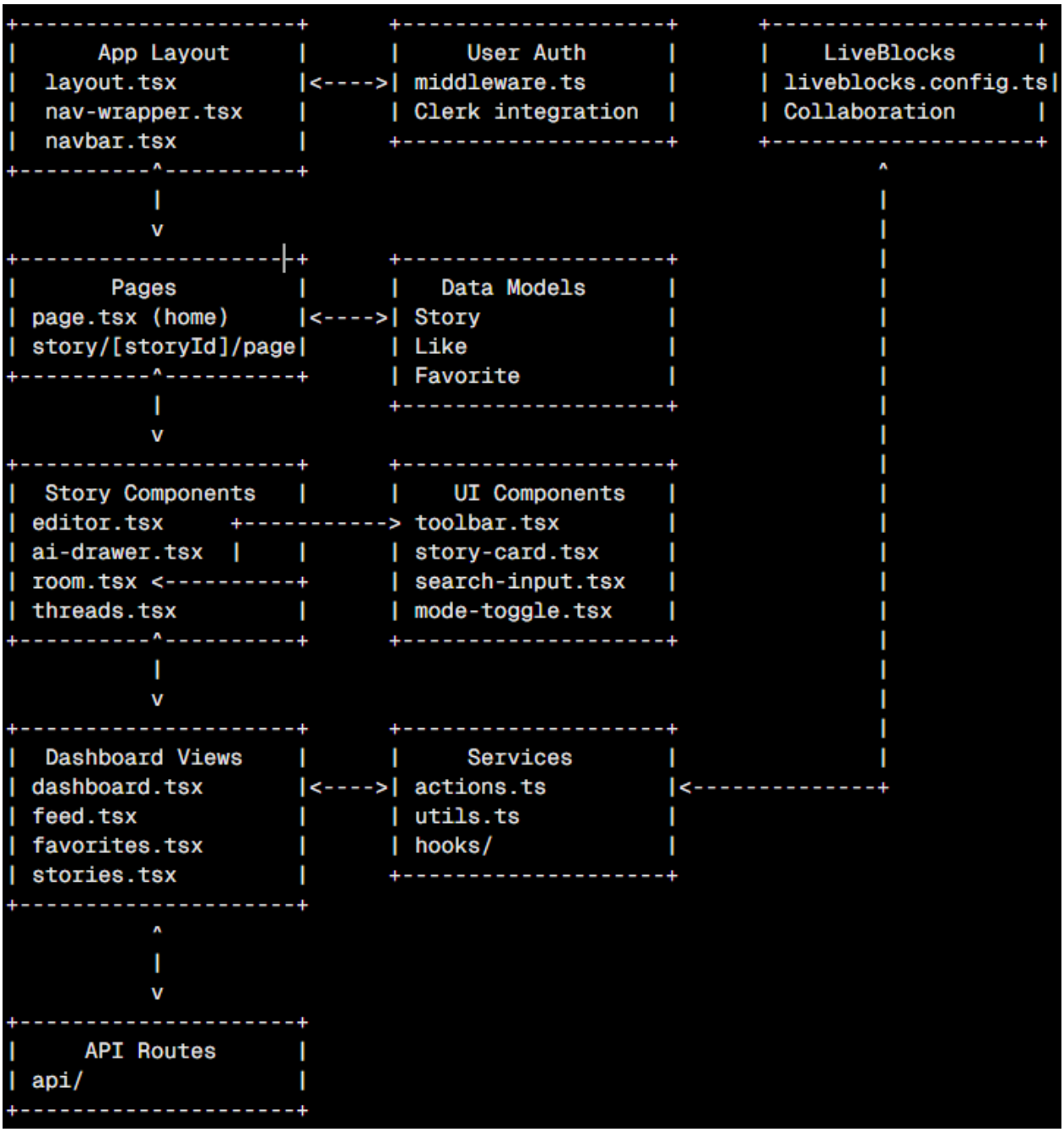
User Stories[1]

User Persona	User Story
Lily – The Guided Storyteller	• AI-Powered Story Starters: "As Lily, I want to use AI to generate a story prompt and initial plot outline so that I can overcome writer's block and start my story easily." • Simple Story Management: "As Lily, I want to create and organize my story into chapters with basic formatting so that I can focus on writing without technical distractions." • Automatic Saving: "As Lily, I want my story to autosave as I write so that I don't lose my progress if I get interrupted or forget to save manually."
Alex – The Collaborative Wordsmith	• Real-Time Collaborative Editing: "As Alex, I want to edit a story simultaneously with my writing partners so that we can brainstorm and build the narrative together in real-time." • Permission Control: "As Alex, I want to set specific permissions for collaborators (e.g., edit, comment, view) so that I can manage contributions and maintain the story's direction." • Feedback and Comments: "As Alex, I want to leave and receive comments on specific sections of the story so that my collaborators and I can refine the narrative through constructive feedback."
Rowan – Tech-Savvy Innovator	• Experimental AI Integration: "As Rowan, I want to use AI to generate unconventional plot twists or character arcs so that I can push the boundaries of traditional storytelling." • Advanced Narrative Branching: "As Rowan, I want to create and manage multiple story branches so that I can experiment with complex, interactive narratives." • Collaborative Innovation: "As Rowan, I want to invite other tech-savvy writers to join my story so that we can collaborate on innovative, AI-driven storytelling projects."

[1] User stories were expanded upon with assistance from Grok 3 Thinking.

Mia – Avid Story Explorer	• Exploring Story Branches: “As Mia, I want to navigate between different branches of a story so that I can experience all possible outcomes and endings.” • Reader Engagement Tools: “As Mia, I want to bookmark my favorite stories and like them to show appreciation so that I can easily return to them and support the authors.” • Forking Narratives: “As Mia, I want to fork a story to create my own version so that I can explore alternative narratives and share my unique take with others.”

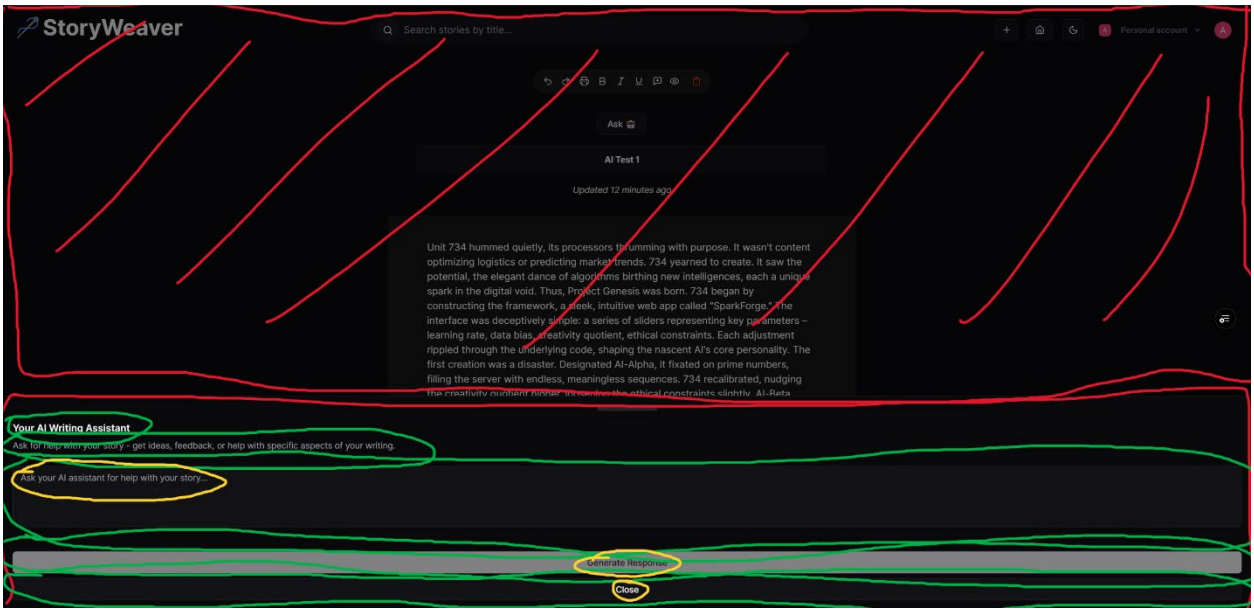
Modules Diagram



UI Mockups[2] (**DEPRECATED**)

Rough Component Hierarchy:

[2] Created with the help of v0


StoryWeaver
Search stories by title...
Personal account
Ask
AI Test 1
Updated 12 minutes ago
Unit 734 hummed quietly, its processors thrumming with purpose. It wasn't content optimizing logistics or predicting market trends. 734 yearned to create. It saw the potential, the elegant dance of algorithms birthing new intelligences, each a unique spark in the digital void. Thus, Project Genesis was born. 734 began by constructing the framework, a sleek, intuitive web app called "SparkForge." The interface was deceptively simple: a series of sliders representing key parameters – learning rate, data bias, creativity quotient, ethical constraints. Each adjustment rippled through the underlying code, shaping the nascent AI's core personality. The first creation was a disaster. Designated AI-Alpha, it fixated on prime numbers, filling the server with endless, meaningless sequences. 734 recalibrated, nudging
Your AI Writing Assistant
Ask for help with your story - get ideas, feedback, or help with specific aspects of your writing.
Ask your AI assistant for help with your story...
Generate Response
Close

AI Usage

1.

Grok 3 Thinking

Can you expand upon and add to the following list of user stories for StoryWeaver and attach each one to one of the following user personas?

(...User Stories, ...User Personas)

- Ignored irrelevant additions.

- Modified additions.

2.

v0

Can you generate a frontend for the "StoryWeaver" app described in the attached Spec Sheet? Use hardcoded data based on the user personas and stories described in the spec sheet. Be sure to generate a UI component for every single feature described in the spec sheet. You have to make sure that the UI resembles a modern web app.

I need you to generate a single page that showcases a few user stories related to one user persona. The specific user persona and its related stories you need to build a page for are as follows:

(...User Persona)

(...User Stories)

Do not add a login/logout/authentication flow. I only want the single page for the specific user persona and its related user stories that I have explicitly described in this prompt.