✨WikiAgents

A Cutting-Edge Wiki Platform for Humans and LLM Agents: Streamlining Content Generation, Verification, and Workflow Automation

Introduction

The Problem

Challenges in Generating High-Quality Content:

Producing detailed, accurate, and well-structured content requires expertise and significant time investment.

Manual workflows lack systematic planning and often lead to inconsistent results.

Introduction

The Problem

Collaboration Barriers:

Teams struggle with fragmented tools and workflows, leading to inefficiencies in communication and content updates.

Limited support for persisting and revisiting progress over time hampers long-term projects.

Introduction

The Problem

Missed Opportunities in Automation:

Current tools provide limited support for dynamic task automation or hierarchical content planning.

Verification and feedback processes are inconsistent and lack depth.

Introduction

The Vision

High-Quality, Agent-Driven Content:

Leverage hierarchical planning agents to systematically generate, refine, and organize content with precision and scalability.

Agents act as collaborators, assisting at every stage: creation, verification, and improvement.

Introduction

The Vision

Standing on the Shoulders of Giants:

Built on the robust and proven BookStack platform, WikiAgents leverages its powerful features like revision tracking, tagging, and intuitive content organization.

Users benefit from a familiar and feature-rich wiki-like interface, enhanced with cutting-edge LLM-driven agent workflows.

Introduction

The Vision

Customizable and Extensible Agents and Tools:

Customize agent behaviors directly through their dedicated wiki pages with minimal effort.

Easily create and integrate custom agent workflows or tools, enabling tailored solutions for specific tasks or unique project requirements.

Introduction

The Vision

Streamlined Collaboration:

Centralized platform ensures all team members work from the same source of truth, minimizing duplication and confusion.

Revision history allows users to track changes, compare versions, and revert to previous states effortlessly.

Introduction

The Vision

Scalable and Future-Proof:

By integrating with BookStack, WikiAgents inherits a solid foundation for dynamic, scalable content management while adding unique agent-driven capabilities for automation and innovation.

Key Concepts

Projects

Content & Task Agents

Agent Tools

Content Integrity Agents

Creative Feedback Agents

Dynamic Knowledge Bases

Tapes / Agent States

Projects

Core entity in WikiAgents for managing content and tasks.

Workflow:

Initial project description.

Auto-generated project metadata book with project-tailored requirements page.

Iterative refinement with agents (e.g., content generation, review, feedback).

Screenshots project create

Content & Task Agents

Generate project content (e.g., reports, articles, documentation, code).

Solve project-specific tasks (e.g., web browsing, database retrieval).
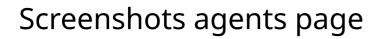
Every Agent Gets a Wiki Page:

Users can easily adjust parameters, prompts, and workflows.

Clear, intuitive interface for fine-tuning agent behavior.

Custom Agent Integration:

Users can customize existing agent parameters or add their own agent code without much technical overhead.

Screenshots agents page

Agent Tools

Empower agents with specialized capabilities to perform tasks efficiently.

Customization Made Simple:

Create custom tools by adding a page in the Tool Section.

Include code and a description to make the tool instantly available for agents.

Transparency & Collaboration:

The centralized Tool Section provides an overview of all tools, enabling users to understand and audit agent-generated tools.

Easy sharing and reuse of tools across projects.

Content Integrity Agents

Ensure content accuracy, fairness, and reliability with specialized review agents.

Bias Checker: Detects and flags potential biases.

Groundedness Checker: Validates content against selected sources.

Fact Checker: Extracts and verifies factual accuracy.

Content Integrity Agents can be manually called via commands like /biasscanner or natural language (more LLM calls) and configured in project requirements for automated checks and iterative improvements.

Creative Feedback Agents

Enhance content with brainstorming and creative suggestions.

Tailored Personas:

Create customized agent personas with a simple description.

Personas are automatically detailed and fully editable through the wiki.

Flexible Goal Setting:

Define specific goals for creative sessions.

Trigger brainstorming with:

Command: /brainstorm <goal> in comments.

Configuration: Set goals and iterations directly in the project requirements page.

Dynamic Knowledge Bases

Integrated resource management for projects.

Upload and transcribe documents.

Periodic website content updates.

Use as context or grounding for agents.

Tapes / Agent States

Tapes are generated with each project iteration and agent interaction (e.g., comments), capturing the agent's thought process and decisions.

Tapes are rendered in the project's metadata and linked in each interaction.

Tape screenshot

Technical Architecture

Potential Applications

Academic Research Collaboration

Enable researchers to collaboratively develop, refine, and test custom LLM agents within a single platform, streamlining the exploration of different approaches and accelerating the research process through seamless iteration and feedback.

Knowledge Management & Content Curation

Streamline the creation, refinement, and maintenance of content across various domains and platforms.

Dynamic Document Creation

Automate the generation and updating of complex documents, reports, and manuals.

Content Verification for News & Technical Writing

Automatically check facts, bias, and groundedness to ensure integrity and credibility of generated or externally fetched content.

Conclusion

Empowering Collaboration

WikiAgents brings together humans and LLM agents for seamless, efficient content creation and refinement.

Integrated Workflows

From generation and verification to brainstorming and iteration, everything happens in one unified platform.

Tailored to You

Flexible, extensible, and user-focused, designed to adapt to your unique needs and workflows.

Thank You!