



# 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 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 agents 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**

**Knowledge Bases**

**Tapes / Agent States**



# Projects

Core entity in WikiAgents for creating content and solving tasks.

Workflow:

The user gives an initial project description.

WikiAgents auto-generates project metadata including a project-tailored agent-assisted requirements wizard:

- Automatic project description improvement and identification of key components
- Output structure suggestion (simple/detailed)
- Automatic agent selection and persona adjustments
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Iterative refinement with agents.



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 tools.

Clear, intuitive interface for fine-tuning agent behavior.

## **Custom Agent Integration:**

Users can customize parameters of existing agents 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 called via comment 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

## Personal Research & Task Automation

Use WikiAgents as a personal platform for automating research tasks, managing knowledge, and streamlining workflows tailored to individual needs.

## 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.



# 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!





Questions? I'd love to hear your thoughts!

`contact@wikiagents.ai`

`https://github.com/WikiAgents/WikiAgents`

