

Cuttlefish Labs - AI-Driven DAO & Treasury Platform

Overview: Cuttlefish Labs is a comprehensive platform that combines artificial intelligence (AI) agents, decentralized governance (DAO), and secure digital treasury management. The system enables teams and organizations to collaborate effectively while maintaining transparency and security.

Key Components:

1. AI Agent Simulation The platform features intelligent agents that can: - Generate project ideas and proposals - Assess risks and provide recommendations - Draft grant proposals and funding requests - Coordinate with other agents for complex tasks
2. Decentralized Governance (DAO) - Group voting system for collective decision-making - Transparent proposal tracking and voting records - Automated execution of approved initiatives - Persistent state management for governance history
3. Multi-Signature Treasury - Secure digital wallet requiring multiple approvals - Smart contract implementation for fund management - Blockchain-based transparency and audit trails - Integration with Arbitrum network for efficiency
4. Web Dashboard - Modern, user-friendly interface - Real-time status monitoring - Agent factory for simulation and testing - Grant application tracking and management

Technical Architecture: - Frontend: Next.js, React, Tailwind CSS - Backend: Python Flask for RAG system - AI: OpenAI GPT-4, LangChain integration - Blockchain: Solidity smart contracts on Arbitrum - Database: FAISS for vector search, local storage

Use Cases: - Research organizations managing grant funds - DAOs requiring transparent governance - Teams needing AI-assisted decision making - Projects requiring secure multi-party fund management

The platform demonstrates how modern technology can enhance collaboration, transparency, and efficiency in organizational management.