

EIP Sentiment Analyzer

User Interface Documentation

Application Overview

The EIP Sentiment Analyzer is a comprehensive Flask web application designed for advanced smart contract analysis and Ethereum Improvement Proposal (EIP) evaluation. The application leverages AI-powered insights and sentiment analysis to provide valuable feedback on blockchain development standards.

Key Features

Public Features:

- Smart Contract Generator with AI-powered EIP recommendations
- Interactive Dashboard with sentiment visualizations
- EIP status filtering (Final, Living, Draft, Review)
- Sentiment-based warnings for code standards

Admin Features:

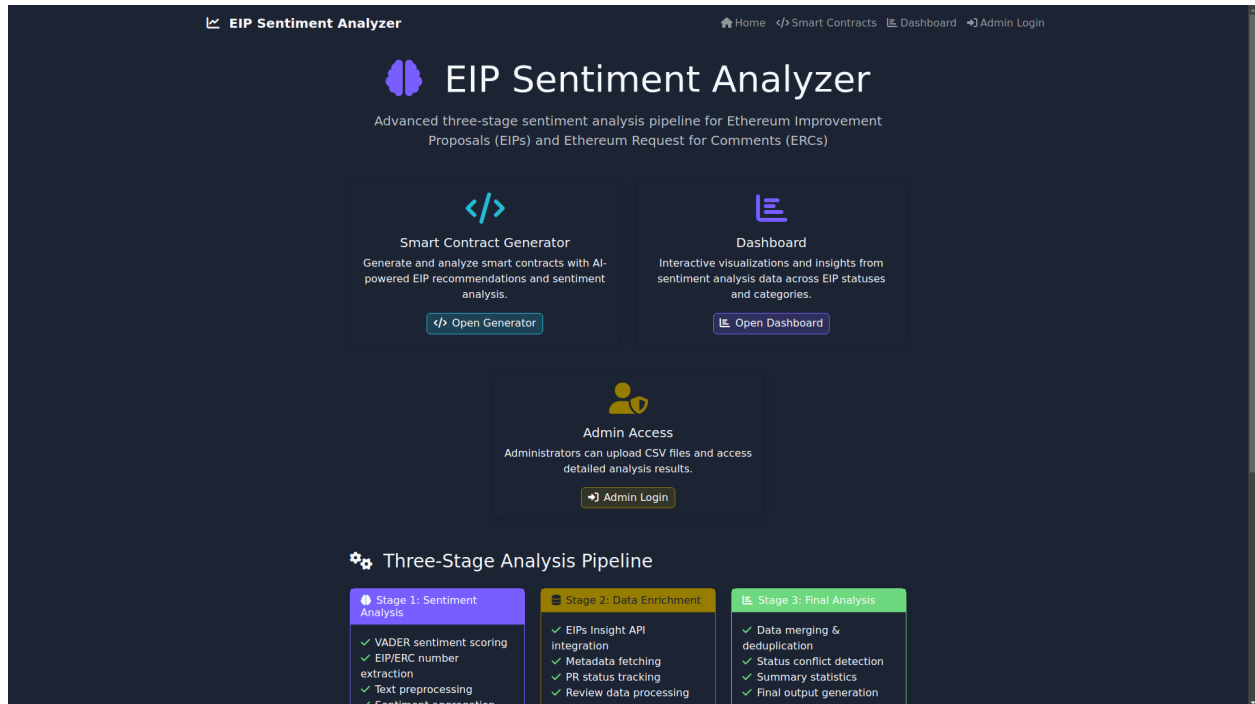
- CSV file upload for sentiment analysis
- Three-stage analysis pipeline processing
- Results management and data exports
- Job status tracking and monitoring

Technology Stack

- Flask web framework with Python backend
- PostgreSQL database for data persistence
- OpenAI GPT-4o for AI-powered analysis
- Bootstrap dark theme for responsive UI
- Chart.js for interactive data visualizations
- NLTK for sentiment analysis processing
- Flask-Login for authentication and session management

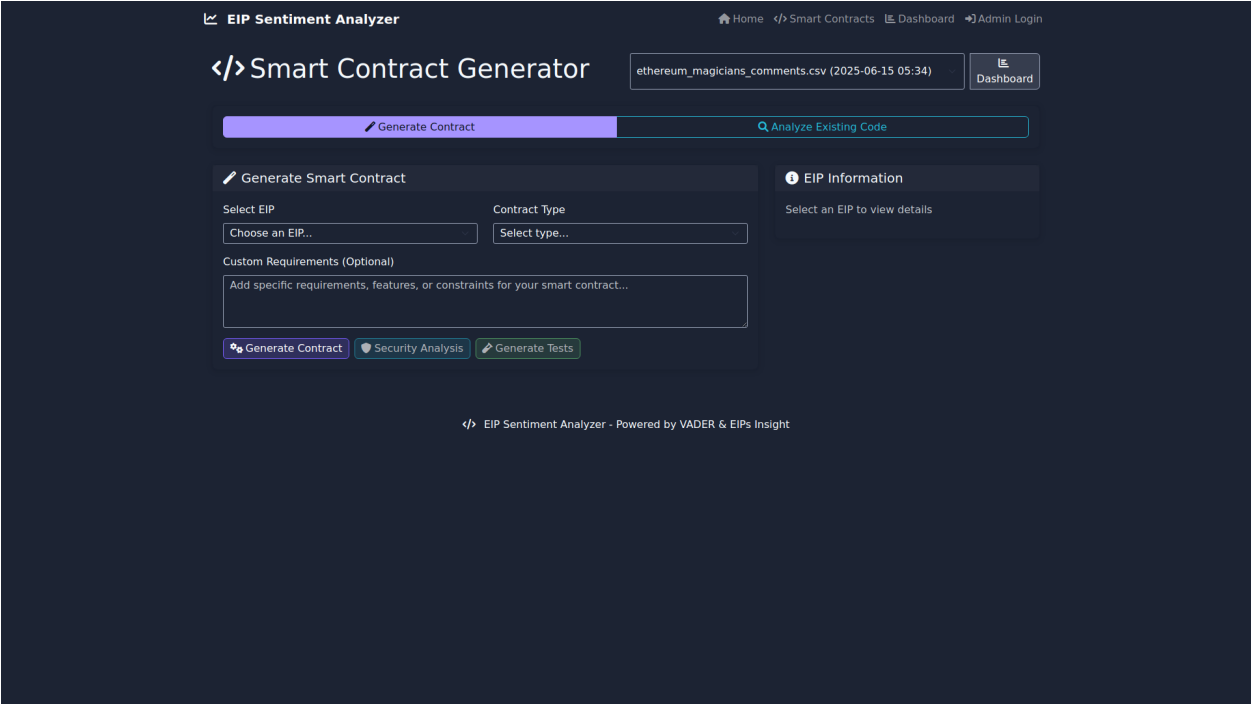
Homepage - Landing Page

The main landing page presents the application's core features to users. Public users can access the Smart Contract Generator and Dashboard, while admin login provides access to additional features like CSV upload and results management. The interface uses a clean, card-based layout with clear navigation and feature descriptions.



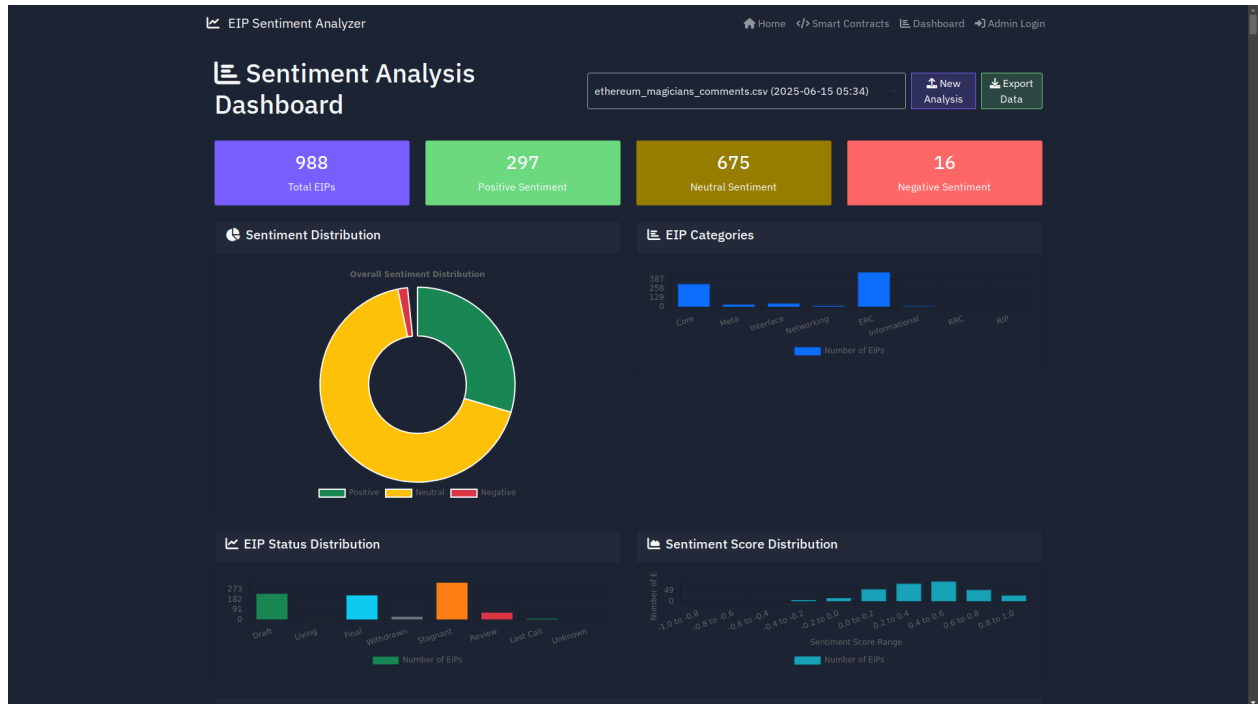
Smart Contract Generator

The Smart Contract Generator is the application's flagship feature, providing AI-powered smart contract generation and analysis. Users can generate contracts from EIP specifications, analyze existing code for security vulnerabilities, and receive EIP recommendations with sentiment-based warnings. The interface includes multiple analysis modes and EIP status filtering.



Interactive Dashboard

The Dashboard provides comprehensive visualizations of EIP sentiment analysis data. Users can explore sentiment trends across different EIP categories and statuses through interactive charts. The dashboard includes filtering options and data export capabilities, making it accessible to both technical and non-technical users.



Admin Login Portal

The admin login portal provides secure access to administrative features. Administrators can upload CSV files for sentiment analysis, manage analysis jobs, and access detailed results. The login interface includes clear instructions and credential requirements for admin access.

EIP Sentiment Analyzer

Home Smart Contracts Dashboard Admin Login

Admin Login

Email

Password

Login

Admin Access Required

Only administrators can upload CSV files and view analysis results.

Back to Home

EIP Sentiment Analyzer - Powered by VADER & EIPs Insight

Access Control & Security

Public Access:

- Homepage with feature overview and navigation
- Smart Contract Generator for AI-powered analysis
- Dashboard with sentiment data visualizations

Administrator Access:

- CSV file upload for sentiment analysis processing
- Analysis job management and status monitoring
- Results viewing and data export capabilities
- Administrative dashboard features

Authentication:

Admin credentials are required for protected features:

- admin@example.com / admin123
- admin@sentiment.com / password123

The application implements role-based access control with Flask-Login for session management and secure authentication handling.