AITALK: AI-Powered Project & Code Assistant

AITALK is a command-line AI tool that boosts developer productivity. It automates project creation, code summarization, git insights, and interactive chat.
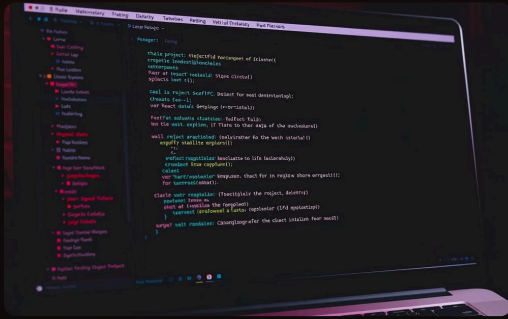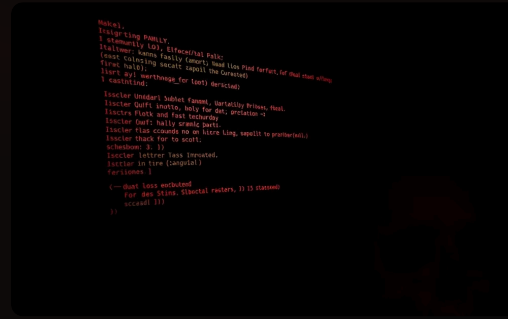
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Key Features Overview

Project Generation

Instantly scaffold React projects from plain English descriptions.

Command Explanation

Explain last N shell commands and outputs from your terminal session.

File Summarization

Summarize .txt, .pdf, or .docx files extracting key insights.

Git Summary

Analyze git history and status with technical insights and suggestions.

Interactive Chat Feature

1

Start Chat

Launch interactive AI chat in your terminal with aitalk --chat.

2

Conversation Context

Maintains full conversation history for contextual AI responses.

3

Exit Chat

Type exit or quit to leave chat mode anytime.

How Interactive Chat Works

Input Loop

Waits for user input and adds it to conversation history.

Prompt Formatting

Formats conversation for Groq LLaMA model to generate replies.

AI Response

Prints AI reply and continues until user exits.

Explain Last N Shell Commands

Usage

Run aitalk --explain-5 to explain last 5 commands and outputs.

Session Logging

Enable logging with script ~/aitalk_session.log before running.

AI Explanation

Groq LLM returns step-by-step human-readable command explanations.

How Command Explanation Works

Log Parsing

Reads log file and finds last N command–output blocks.

Prompt Construction

Builds prompt with commands and outputs for AI analysis.

Output

Prints clear, concise explanation from AI in terminal.

Git Summary Feature

Usage

Run aitalk --git-summary inside any git repository.

Summary Content

Includes commits, merges, staged changes, insights, and suggestions.

How Git Summary Works

Data Collection

Runs git status and git log commands to gather info.

Prompt Creation

Combines git data into prompt for Groq LLM summarization.

Output

Prints professional, technical, human-readable git summary.

File Summarization Feature

Supported Files

- .txt plain text

- .pdf extracted with PyMuPDF

- .docx extracted with python-docx

Usage

Run aitalk --summarise "prompt" file.txt to get AI summary.

Installation & Help

1 Installation

Clone repo, create virtual environment, install dependencies, add Groq API key.

2 Help Command

Run aitalk --help to see all commands and usage instructions.

3 Requirements

Python 3.8+, Node.js, npm, Git, and required Python packages.