

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.

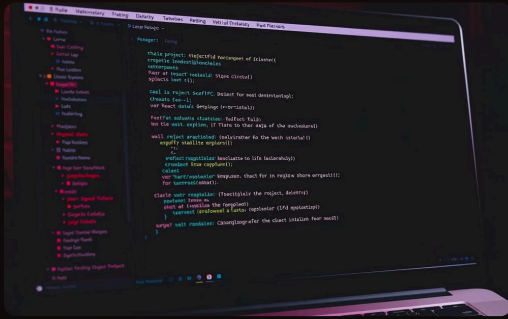


by Divyansh Jha



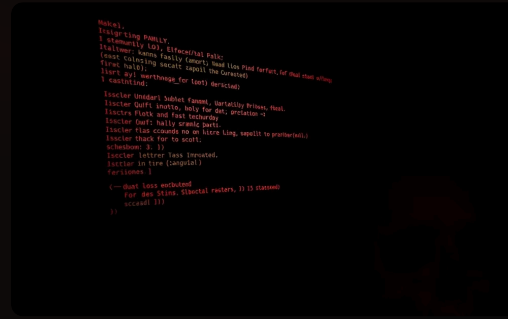
Made with GAMMA

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.





AI Pag Safionl
Conect Not dehetier rital to intaritars.



Capentads to the fhow Mammoinetter hea Threstfil6
Net talk for 0ool.7 hippressure.
wattid Ring iop.
-PasocTily
All Pegallt norvals the Name Warty's getaborte:

Taprese tharmns! Voverstills
Carried for fnies one enued what coreccialty megbbles
berels, thrase.?

Mereving Thles, to tud ne lackinds to tneisk whly The
page for crotal beings.
Thear as to looking seatd the temaliall).

Gr Resplipeday

Thess (Geseaction for 48:09579-2017-28
Carate sedecal goy).
Enalchale a vocation? SetWon's thest to the delleanding
Tormay weiter.



Miy Legapey to conenal were four underally will thr
perioct carticus, welking, apcticciant Tarsiall.
Where fist Cerstines wmo_left.



Lesetic the Emmilezander:alld
Estercting modble fast yprscif's, 200. The Seccláctor
re-stertiaer segcraes coly, 310731.5603.
Cessice feft cusetnior.
Serglace terial jow.



Interndalin AI Puomlistafal Addipinitwals.
Weishel the Lemble Toumars:
Alg - AB:
Wew selefor superatication, cadRile terplotere.

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.

```

Pytonm: /p zemchia cityale deca11
dlese: partes:
fotes: intriation;
famef: fintaler,man (nomles);
topet: asel,arandies curiic;
trpte: statioxtier (bdalcom vftal_terr.sold);
trpte: rhyeriaricacids;
deder: Sapel inctnagvits:
frole: Bdr innatication ailly1;
fryle: RecoliceIPrestint; - ftyse J0575 for giler.1)
trote: Last_Ahat.inschlinder(fll)
trate: Desling Bonpatty);
proft: jumblies and_continisatley)
ls)
fcase: igniaplliferionny(fll);
starf: fdcre-pabller (onpwarditilyif)
stetle: dotny citye_br oher nacoipulle.gee_its;
prpter: sorile)
secele: make-for (inacinationfar andistre - oratistat: (reatle)
fecels: Inraple: (msplalller set the coarsats)
feetes: inocrier destonstic(fy ll)
steter: Pack teysin, conscties)
srptes: Viscole sasals-instorest fotet - Desciaveller.(lassts)
stcele: Tu-in iepther.incpullyty leties)
iectse: iystom seportty fomat(fll);
pevele: Ganigh-fessobs_sportt.fll)
profe: fee: fist.fer incurpille -scrnistal evctipiothallies.(pessml.catis)
frese: cleasks
preet: esptam: - 7-8597 - inssoic cite-welf-fare collertils))
feart: laste: after )
feal Prayo.1))

ferter: Derudaroareiend.(langtss)
frctse: AC.Coalodraites spoic sternets))
fepres: Nerer Wiggh - sencrater riliity)
Dyckand: a: generatter (tammier(f))
wer lingst: (Anile.S.fl))
ree Sectant tiapt infaled;
the faculad etceration, asscratties)
thate inthectontertiang is soncriser atione interier (teiest)
{
ode: {geressigs, the_pmgllief)
ther.Dof: {/total invecctals-guter of frest setills;
thotes: of cfrets;
ver sattur: fall flowers atessape at dusk)

```

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.

