

A screenshot of a terminal window with a dark background and light-colored text. The window has three colored window control buttons (red, yellow, green) at the top left. The text inside the window is as follows:

```
> ./start_presentation.sh

Initializing AI Dev Team...
Project: AI-Powered Development Crew
Module: FH JOANNEUM MSD24 Scripting Module
Author: Neil Carelse

Status: Ready
```

# > man ai-dev-team

## DESCRIPTION

An AI-powered development crew designed to read GitHub issues, analyze the codebase, and propose implementation plans.

## STACK

Built on Python 3.10+, CrewAI, and GitHub API integration.

## OBJECTIVE

To enable developers to point an 'AI dev team' at any GitHub repository and instantly generate structured help and solutions.

```
01 > tree ./capabilities
```

```
02   capabilities
```

```
03     ├── 01_issue_analysis.json
04     ├── 02_codebase_awareness.json
05     └── 03_actionable_output.json
```

- Parses requirements and context
- Identifies related PRs and discussions

- Semantic GitHub search
- Parses README & tech stack

- Generates implementation plans
- Suggests code changes & file locations

```
01 > ls -R /structure
02
03
04
05   folder scripts/
06     file main.py Single entry point
07     file github_crew.py Multi-agent engine
08     file example_github_issue.py Lightweight scanner
09
10   folder crew_runner/
11     Tools for git ops, logging, safety checks
12
13   folder docs/
14     Quickstart, guides, troubleshooting
```

```
> cat .env
```

```
GITHUB_TOKEN      = ghp_your_token_here
GITHUB_REPO        = owner/repo
GITHUB_PROJECT_ID = PVT_your_project_v2_id # optional
OPENAI_API_KEY     = your_openai_key_here    # optional
```



File is git-ignored for security.



Project ID enables V2 Board integration.

```
> run setup.sh
```

## REQUIREMENTS

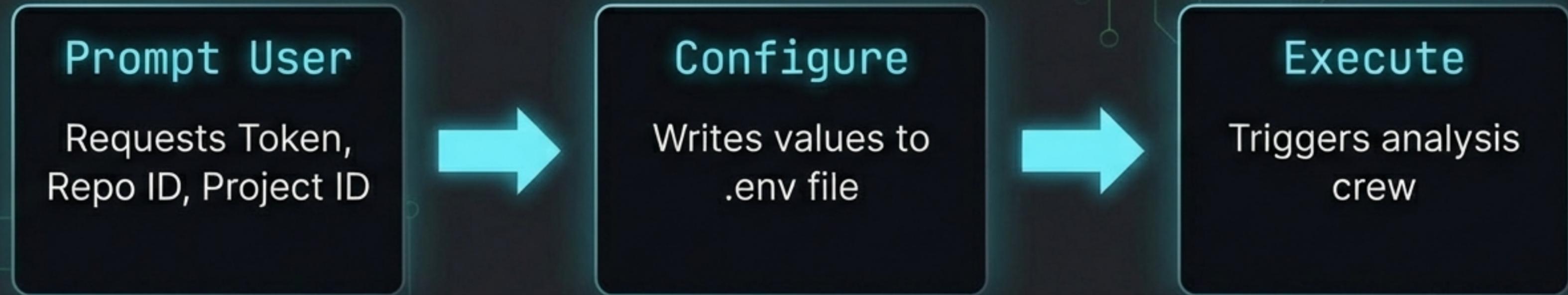
- ✓ Python 3.10+ (Recommended)
- ✓ GitHub Account
- ✓ Personal Access Token (PAT)
- ✓ Scopes: repo, read:org

## TERMINAL

```
01 $ git clone git@github.com:Neotro  
02 onProductions/ai-dev-team.git  
03 $ cd ai-dev-team  
04 $ python3 -m venv .venv  
05 $ source .venv/bin/activate  
06 $ pip install -r requirements.txt  
07  
08  
09
```

```
> python scripts/main.py
```

One-Command Initialization



Designed to reduce friction: **Clone, Run, Analyze.**

```
> python scripts/github_crew.py
```

## Multi-Agent Execution Mode

```
python3 scripts/github_crew.py <issue_id> <owner/repo>
```

**Agent 1:**  
GitHub Issue  
Manager



Reads issue,  
structures problem.



Analyzes code,  
proposes plans.

**Agent 2:**  
Code Analyst

```
> python scripts/example_github_issue.py
```

## Single-Agent Analysis Mode

### Use Case: Single Issue

```
$ .../example_github_issue.py  
owner/repo 123
```

Quick analysis of a specific issue ID.

### Use Case: Repository Scan

```
$ .../example_github_issue.py  
owner/repo
```

Scanning top open issues.

*A lightweight, fast alternative to the full multi-agent crew.*

```
> import projects_v2
```

# GitHub Projects V2 Integration



JetBrains Mono

## Logic

- Connects via `GITHUB_PROJECT_ID`
- Prioritizes based on status/priority fields
- Focuses AI on active board items

## Helper Tools

- `test_project_access.py`
- `test_graphql_projects.py`
- `test_project_fields.py`

> import safety

# Workflow Protection & Verification

**Verification**  
Coverage & testing  
helpers included

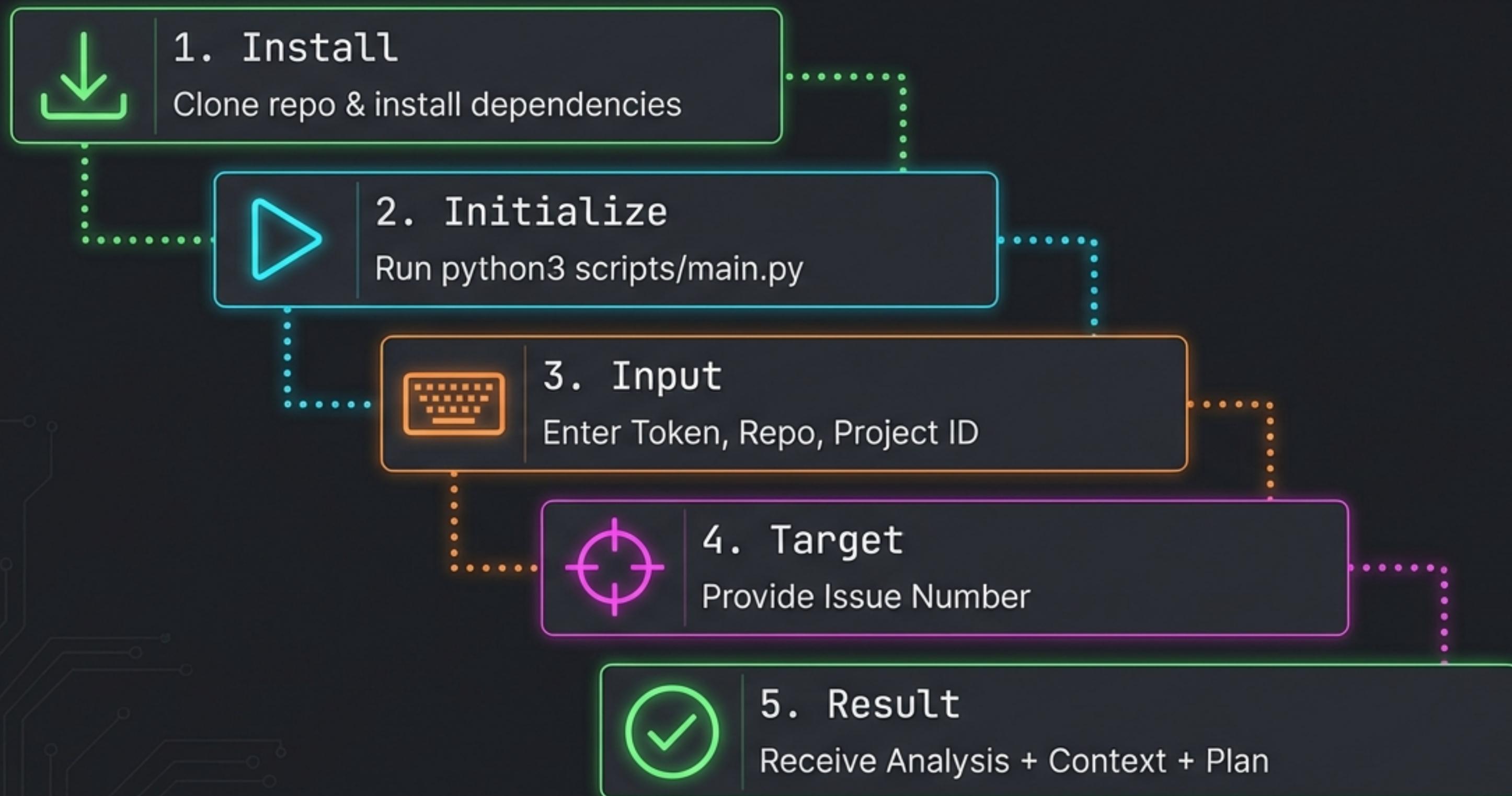
**Path Safety**  
Prevents modification  
outside target repo

**Non-Destructive**  
Changes expressed as  
patches/diffs

Documentation available in /docs for troubleshooting.

```
> sh demo_scenario.sh
```

## Typical User Workflow



```
> git status
```

On branch main

### **Changes to be committed:**

- + Automated Context: Eliminates manual code diving
- + Structured Output: Consistent implementation plans
- + Scalability: Works on any GitHub repo

```
> exit(0)
```

\$ \_

Repository: [github.com/NeotronProductions/ai-dev-team](https://github.com/NeotronProductions/ai-dev-team)  
Status: Process completed successfully.