

A1: Conceptual Architecture

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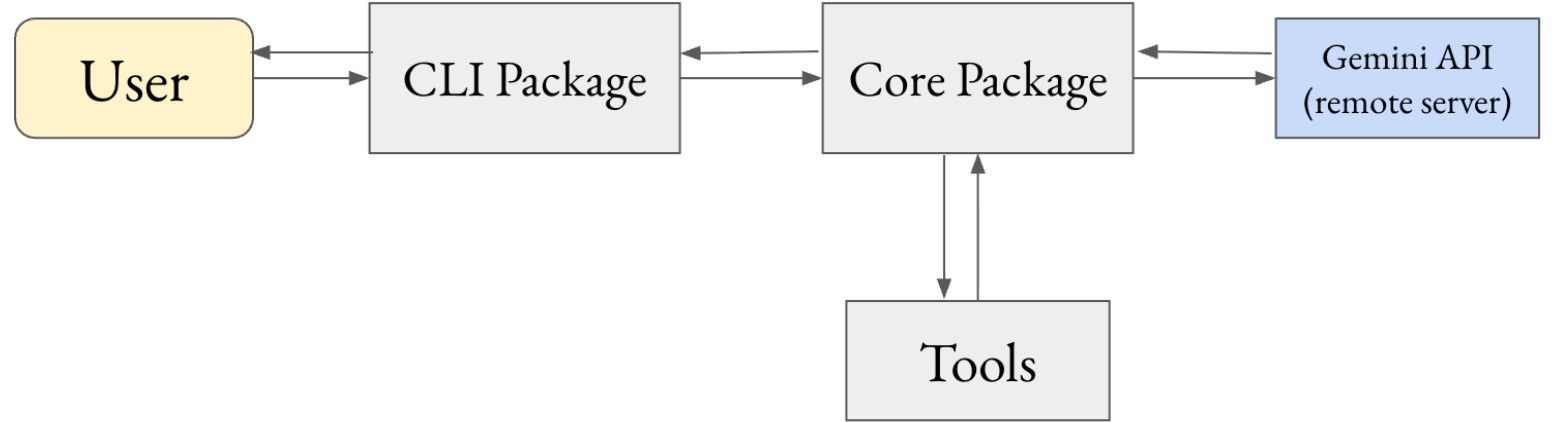


Tip: For getting started,
1. Ask questions, edit files, or run commands.
2. Be specific for the best results.
3. Help for more information.

Write a short paragraph about why Gemini CLI is awesome

GEMINI CLI

Introduction and Architecture Overview



- Open-source CLI agent for Google Gemini
- Gemini 2.5 Pro in the command line
- Highly extensible & customizable

DERIVATION PROCESS

- Reading provided documentation
- Looking for external resources
- Group discussion
- Learned Lucidchart / Krita to make diagrams

CORE COMPONENTS

CLI Package

- Frontend package
- React/Ink Terminal user interface
- Command parsing
- Configuration and authentication

Core Engine

- Backend package
- Prompt instructions
- Agent control logic
- Safety checks

Tools

- Tool orchestration and validation
- Registry and execution

SUBSYSTEMS

CLI Package Systems

User Interaction System

- UI and input management
- Connection to Core

Configuration System

- Account setup & security
- System and project settings

Core Engine Systems

Prompt Management

- Process prompts
- Sends history and files to AI

Agent Control Logic

- Manages workflow
- Execution controls

Tools Systems

Tool Invocation

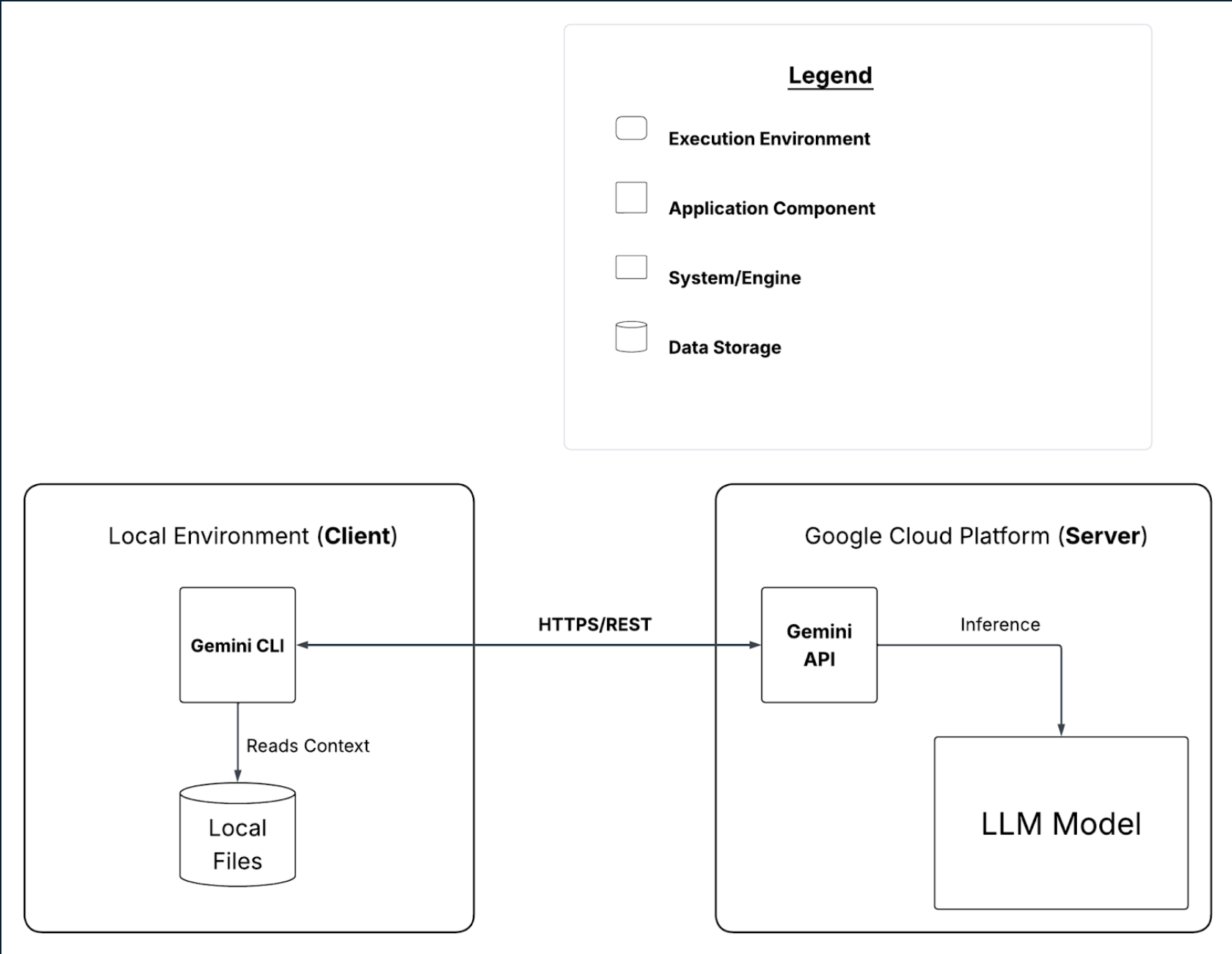
- Execute tools
- Permission checks and confirms rules

Tool Registry

- Stores tool definitions and logic
- Registers new tools

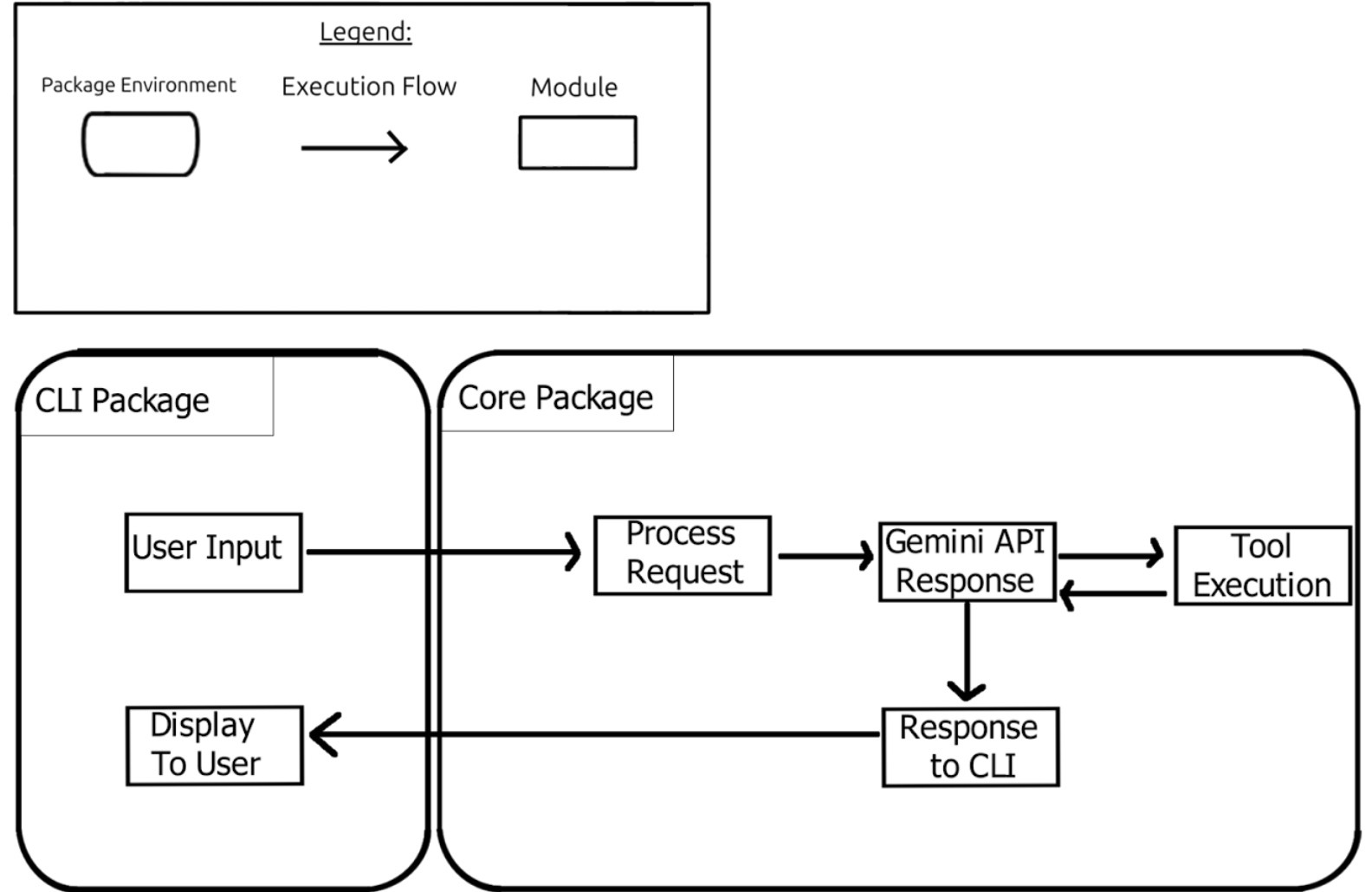
ARCHITECTURE STYLE #1

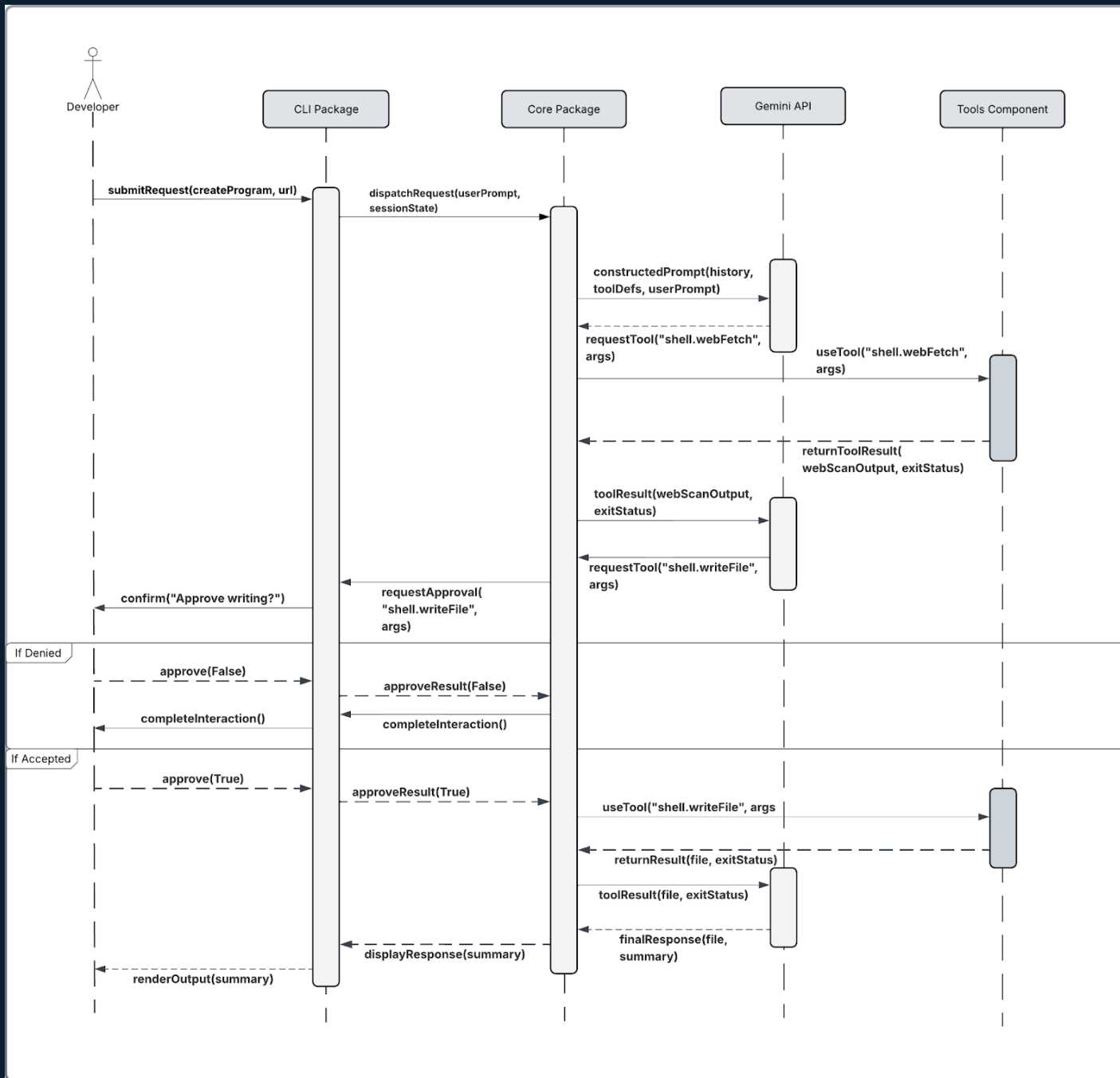
CLIENT-SERVER



ARCHITECTURE STYLE #2

FEEDBACK CONTROL SYSTEM





USE CASE

Create a program based on online specifications

LESSONS LEARNED

- pros and cons of a modular design
- How to analyze technical documentation and extracting architectural information
- Benefits of group collaboration and brainstorming

AI INTERACTION



GUSTAPO THE RAT

322 ai teammate

Ask anything about GUSTAPO THE RAT. Type @ for sources and / for shortcuts.



Model ▾



CONCLUSION

- Gemini CLI's architecture has client-server and feedback-control styles
- Modular design, separate front and backend packages

