

MCP Automation Test - Plugin Summary


Overview

This document summarizes the tasks completed during an MCP (Model Context Protocol) automation test, demonstrating the capabilities of various plugins and tools available through the Claude interface.

Tasks Completed by Plugin


1. Brave Search Plugin

Task: Research AI paper publication platforms **Action:** Searched for "AI paper publication platforms 2025 latest" **Results:**

- Successfully retrieved search results from multiple sources
- Identified top 3 platforms: arXiv (cs.AI), Artificial Intelligence Journal (AIJ), and Journal of Artificial Intelligence Research (JAIR)
- Provided direct links and descriptions for each platform **Status:**  Completed Successfully

2. GitHub Plugin


Task: Connect to GitHub and list repository contents **Target Repository:** <https://github.com/inference-ai-course/QiZhang-homework> **Actions Performed:**

- Successfully authenticated with GitHub API
- Searched for and located the target repository
- Attempted to retrieve repository contents
- Confirmed repository exists but is currently empty **Findings:**
- Repository owned by "inference-ai-course" organization
- Created on July 24, 2025
- Description: "homework repo"
- Status: Public repository, currently empty **Status:**  Completed Successfully (confirmed empty repository)


3. Puppeteer Plugin

Task: Navigate to inference.ai website and capture screenshot **Actions Performed:**

- Successfully navigated to <https://www.inference.ai/>
- Captured full-page screenshot at 800x600 resolution


- Saved screenshot as "example.png" **Website Content Observed:**
- Dark theme with pink/magenta branding
- Main heading: "Get Your Fractionalized GPUs"
- Tagline: "10x your number of workloads with our GPU virtualization"
- Two CTA buttons: "Free Sample GPUs" and "Access the Console" **Status:**  Completed Successfully

4. Filesystem Plugin

Task: Create folder and file on Desktop **Requested Action:** Create "mcp_test" folder with "hello.txt" file containing "Hello MCP!" **Result:** Plugin not available **Status:**  Not Available **Note:** Filesystem operations require local system access which isn't available through the current MCP plugin set. Alternative solutions suggested (GitHub, Notion, or manual creation).


5. Sequential Thinking Plugin

Task: Create step-by-step technical interview preparation plan **Actions Performed:**

- Used 8-step sequential thinking process to analyze requirements
- Systematically broke down interview preparation into logical phases
- Generated comprehensive preparation plan covering:
 - Company research and role understanding
 - Technical skill development
 - Coding practice methodology
 - Behavioral interview preparation
 - Mock interview sessions
 - Final preparation logistics **Output:** Detailed 5-phase preparation plan with daily schedules, resources, and success metrics **Status:**  Completed Successfully

6. Notion Plugin

Task: Create new page with task summary **Attempted Actions:**

- Tried to search Notion workspace
- Attempted to create new page **Result:** Authentication failed **Error:** "API token is invalid" **Status:**  Authentication Required **Note:** Requires proper Notion integration setup with valid API token and workspace permissions.

Plugin Availability Summary

Plugin	Status	Functionality Tested
Brave Search	✔ Available	Web search and content retrieval
GitHub	✔ Available	Repository access and content management
Puppeteer	✔ Available	Web automation and screenshot capture
Sequential Thinking	✔ Available	Structured problem-solving and planning
Filesystem	✗ Not Available	Local file system operations
Notion	⚠ Requires Setup	Workspace content management

Key Insights

Working Plugins

- **Brave Search:** Excellent for research tasks and web content discovery
- **GitHub:** Full repository management capabilities, useful for code projects
- **Puppeteer:** Powerful web automation for testing and content capture
- **Sequential Thinking:** Valuable for complex planning and structured analysis

Setup Required

- **Notion:** Needs proper integration configuration with workspace access
- **Filesystem:** Not available in current MCP environment (security limitation)

Recommendations

1. **For Research:** Brave Search provides comprehensive web search capabilities
2. **For Development:** GitHub plugin offers full repository management
3. **For Web Testing:** Puppeteer enables automated testing and content capture
4. **For Planning:** Sequential Thinking helps structure complex problem-solving
5. **For Documentation:** Consider using GitHub or artifact creation when Notion isn't available

Test Completion Summary

- **Total Tasks Attempted:** 6
- **Successfully Completed:** 4
- **Unavailable/Failed:** 2
- **Success Rate:** 67%

The MCP automation test demonstrates strong capabilities across search, development, web automation, and analytical thinking tasks, with some limitations around local file access and workspace integrations requiring proper authentication.