

# AI

## MCP Automation Test

This document summarizes the tasks completed using various MCP (Model Context Protocol) plugins during automation testing.

### Plugin Tasks Summary

#### GitHub Plugin

- Repository Management: Created repositories, managed branches, and handled pull requests
- Code Review: Submitted reviews, added comments to pull requests, and managed review workflows
- Issue Tracking: Created, updated, and managed GitHub issues with labels and assignments
- CI/CD Integration: Monitored workflow runs, checked build statuses, and managed Actions

#### Brave Search Plugin

- Web Search: Performed comprehensive web searches for current information and research
- Local Business Search: Located businesses and services with detailed information including ratings and hours

#### Weather Plugin

- Weather Forecasting: Retrieved detailed weather forecasts for specific coordinates
- Alert Monitoring: Checked weather alerts and warnings for US states

#### Filesystem Plugin

- File Operations: Created, read, edited, and managed files and directories
- Directory Management: Listed directory contents, created folder structures, and organized files
- File Search: Searched for files using patterns and retrieved file metadata

## **Puppeteer Plugin**

- Web Automation: Navigated to websites, filled forms, and clicked elements
- Screenshot Capture: Took screenshots of web pages and specific elements
- JavaScript Execution: Ran custom JavaScript code in browser contexts

## **Sequential Thinking Plugin**

- Problem Analysis: Broke down complex problems into structured thinking steps
- Iterative Reasoning: Revised and improved thought processes through multiple iterations
- Solution Verification: Generated and validated hypotheses for complex scenarios

## **Notion Plugin**

- Content Management: Created pages, blocks, and databases within Notion workspaces
- Data Organization: Structured information using rich text, lists, and hierarchical content
- Collaboration: Added comments, managed user permissions, and facilitated team workflows

## **Web Search & Fetch Plugin**

- Information Retrieval: Searched web content and fetched specific pages for detailed analysis
- Content Analysis: Extracted and processed information from various web sources

## Testing Outcomes

All MCP plugins demonstrated successful integration and functionality across their intended use cases. The automation testing confirmed robust API interactions, proper error handling, and seamless data flow between different plugin systems.

This comprehensive testing validates the MCP framework's capability to orchestrate complex multi-tool workflows effectively.