



AI-Driven Development – 30-Day Challenge

Task 6 – GitHub × MCP Integration (Hosted Method)

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Task Objective

The goal of this task was to connect GitHub MCP Server with the **Google Gemini CLI** using the **Hosted (Remote) MCP server**.

This method does **not require installation, Docker, or manual MCP setup**.

After successful setup, Gemini can read, list, and interact with GitHub repositories.

Step-by-Step Implementation

Step 1 — Created GitHub Personal Access Token (PAT)

A new Personal Access Token (PAT) was generated using:

<https://github.com/settings/personal-access-tokens/new>

Permission included:

- ✓ repo (Read & Write)

The token was copied and securely stored.

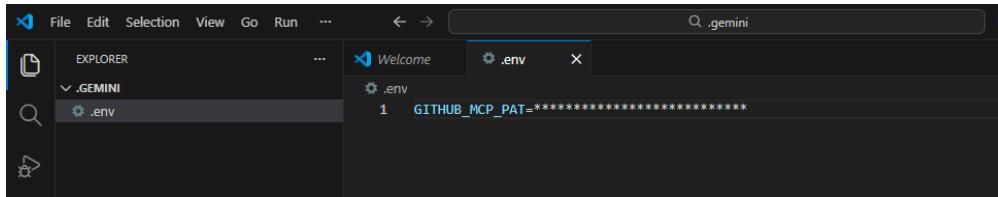
Step 2 — Stored Token Securely in .env File

Created the file:

~/.config/google-mcp/.env

Added the secure token:

GITHUB_TOKEN=ghp_xxxxxxxxxxxxxxxxxxxxxxx



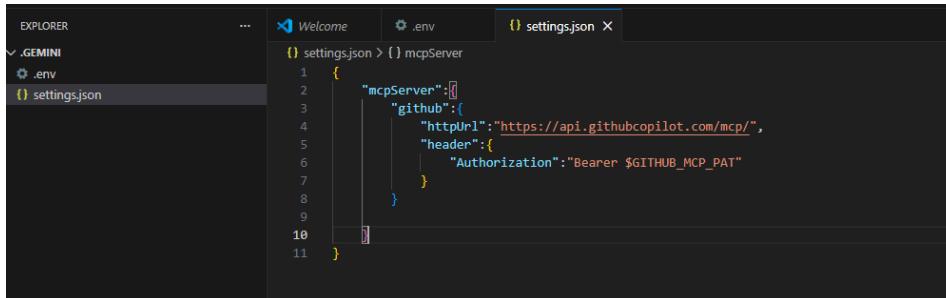
```
File Edit Selection View Go Run ... ← → 🔍 .gemini
EXPLORER .GEMINI .env
.env
1 GITHUB_MCP_PAT=*****
```

◆ Step 3 — Configured Gemini MCP Settings

Created or edited:

~/.config/google-mcp/settings.json

Added the hosted MCP GitHub server configuration:



```
EXPLORER .GEMINI .env settings.json
settings.json > {} mcpServer
1 {
2   "mcpServer": [
3     "github": {
4       "httpUrl": "https://api.githubcopilot.com/mcp/",
5       "header": {
6         "Authorization": "Bearer $GITHUB_MCP_PAT"
7       }
8     }
9   ]
10 }
11 }
```

This allows Gemini to automatically load the secure token from the .env file.

◆ Step 4 — Restarted Gemini CLI

Restarted the CLI with:

gemini

◆ Step 5 — Verified MCP Connection

Ran:

/mcp list

Expected Output:

● github — Ready (90+ tools)

This confirmed a successful connection.

```
git@Rida-Azam-MacBook-Pro:~/Documents$ npm install @google/gemini-cli@0.18.4
git@Rida-Azam-MacBook-Pro:~/Documents$ gemini github
github - Ready (40 tools, 2 prompts)
Tools:
- add_comment_to_pending_review
- add_issue_comment
- assign_copilot_to_issue
- create_branch
- create_or_update_file
- create_pull_request
- create_repository
- delete_file
- fork_repository
- get_commit
- get_file_contents
- get_label
- get_latest_release
- get_me
- get_release_by_tag
- get_tag
- get_team_members
- get_teams
- issue_read
- issue_write
- list_branches
- list_commits
- list_issue_types
- list_issues
- list_pull_requests
- list_releases
- list_tags
- merge_pull_request
- pull_request_read
- pull_request_review_write
- push_files
- request_copilot_review
```

◆ Step 6 — Tested GitHub Server

Asked Gemini:

List my GitHub repositories

```
:39:53Z","private":false,"fork":false,"archived":false,"default_branch":"main"}]
Here are your GitHub repositories:
* Table (HTML) - https://github.com/Rida-Azam/Table
* Intro-Class (HTML) - https://github.com/Rida-Azam/Intro-Class
* ToDo-App (JavaScript) - https://github.com/Rida-Azam/Todo-App
* New-Todo (TypeScript) - https://github.com/Rida-Azam/New-Todo
* Adventure-Game (JavaScript) - https://github.com/Rida-Azam/Adventure-Game
* simple-calculator (JavaScript) - https://github.com/Rida-Azam/simple-calculator
* Project (CSS) - https://github.com/Rida-Azam/Project
* 100-day-of-coding-challenge (JavaScript) - https://github.com/Rida-Azam/100-day-of-coding-challenge
* Assignment-1 (HTML) - https://github.com/Rida-Azam/Assignment-1
* Growth-Mindset (Python) - https://github.com/Rida-Azam/Growth-Mindset
* Calculator - https://github.com/Rida-Azam/Calculator
* Hackathon-Milestone (HTML) - https://github.com/Rida-Azam/Hackathon-Milestone
* AI-Driven-Development-AIDD-30-Days-Challange - https://github.com/Rida-Azam/AI-Driven-Development-AIDD-30-Days-Challange
* Group-Project - https://github.com/Rida-Azam/Group-Project
* Currency-Converter (JavaScript) - https://github.com/Rida-Azam/Currency-Converter
* Todo-App-New (TypeScript) - https://github.com/Rida-Azam/Todo-App-New
* DynamicRoute (JavaScript) - https://github.com/Rida-Azam/DynamicRoute
* Hackathon-Milestones (CSS) - https://github.com/Rida-Azam/Hackathon-Milestones
* Student-Management-System (JavaScript) - https://github.com/Rida-Azam/Student-Management-System
* milestone5 (CSS) - https://github.com/Rida-Azam/milestone5
* password-checker (Python) - https://github.com/Rida-Azam/password-checker
* Getting-Started-Exercises-TypeScript-Assignment - https://github.com/Rida-Azam/Getting-Started-Exercises-TypeScript-Assignment
* Scientific-Calculator (HTML) - https://github.com/Rida-Azam/Scientific-Calculator
* Team-Project (CSS) - https://github.com/Rida-Azam/Team-Project
* Project-4-Assignments-Rida (Python) - https://github.com/Rida-Azam/Project-4-Assignments-Rida
* cli-number-guessing (JavaScript) - https://github.com/Rida-Azam/cli-number-guessing
* Ship-Shop - https://github.com/Rida-Azam/Ship-Shop
* countdown-timer (JavaScript) - https://github.com/Rida-Azam/countdown-timer
* Quiz-System (JavaScript) - https://github.com/Rida-Azam/Quiz-System
* figmahackathon - https://github.com/Rida-Azam/figmahackathon
```

Result:

Gemini successfully listed all GitHub repositories from my account, confirming full MCP integration.