

# AIDD 30-Day Challenge – Task 6 Submission

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 **Time: 1 Hour | Marks: 10 | Deadline: 48 Hours**

 **17 Class Slot: Friday – 6:00 PM to 9:00 PM**

**Instructor: Sir Hamzah Syed**

## **Task Objective**

Students will connect GitHub MCP Server with the Google Gemini CLI using the Hosted (Remote) MCP Server.

This method does not require Docker or MCP installation - it's the simplest method.

After completing this task, AI will be able to read repositories and interact with GitHub.

## **Steps to Complete Task 6 (Easy Method)**

### **Step 1 - Create Your GitHub Personal Access Token (PAT)**

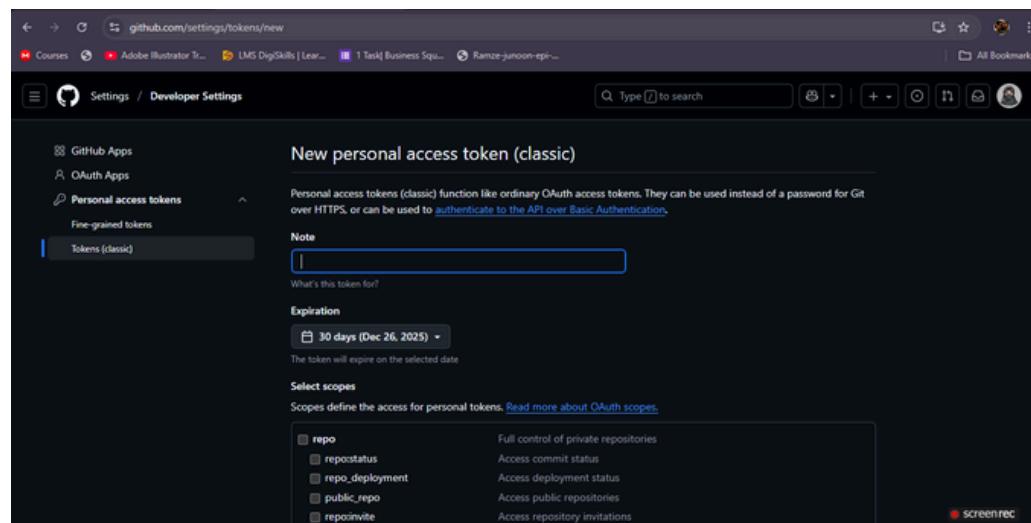
Open this link:

<https://github.com/settings/tokens>

Generate a token with:

 **repo (Read & Write)**

Copy the token and save it safely.



## Token Name

### New personal access token (classic)

Personal access tokens (classic) function like ordinary OAuth access tokens. They can be used instead of a password for Git over HTTPS, or can be used to [authenticate to the API over Basic Authentication](#).

#### Note

Gemini\_CLI\_Access\_Token

What's this token for?

## Some Permissions

#### Select scopes

Scopes define the access for personal tokens. [Read more about OAuth scopes.](#)

<input type="checkbox"/>	<b>repo</b>	Full control of private repositories
<input checked="" type="checkbox"/>	repo:status	Access commit status
<input checked="" type="checkbox"/>	repo_deployment	Access deployment status
<input checked="" type="checkbox"/>	public_repo	Access public repositories
<input checked="" type="checkbox"/>	repo:invite	Access repository invitations
<input type="checkbox"/>	security_events	Read and write security events

<input type="checkbox"/>	<b>user</b>	Update ALL user data
<input checked="" type="checkbox"/>	read:user	Read ALL user profile data
<input checked="" type="checkbox"/>	user:email	Access user email addresses (read-only)
<input type="checkbox"/>	user:follow	Follow and unfollow users
<input checked="" type="checkbox"/>	<b>delete_repo</b>	Delete repositories

## Successfully Generate Token

### Personal access tokens (classic)

[Generate new token ▾](#)

Tokens you have generated that can be used to access the [GitHub API](#).

 Make sure to copy your personal access token now. You won't be able to see it again!

✓ ghp\_



[Delete](#)

Personal access tokens (classic) function like ordinary OAuth access tokens. They can be used instead of a password for Git over HTTPS, or can be used to [authenticate to the API over Basic Authentication](#).

## ◆ Step 2 - Store Your Token Securely

Do NOT put the token directly into JSON.

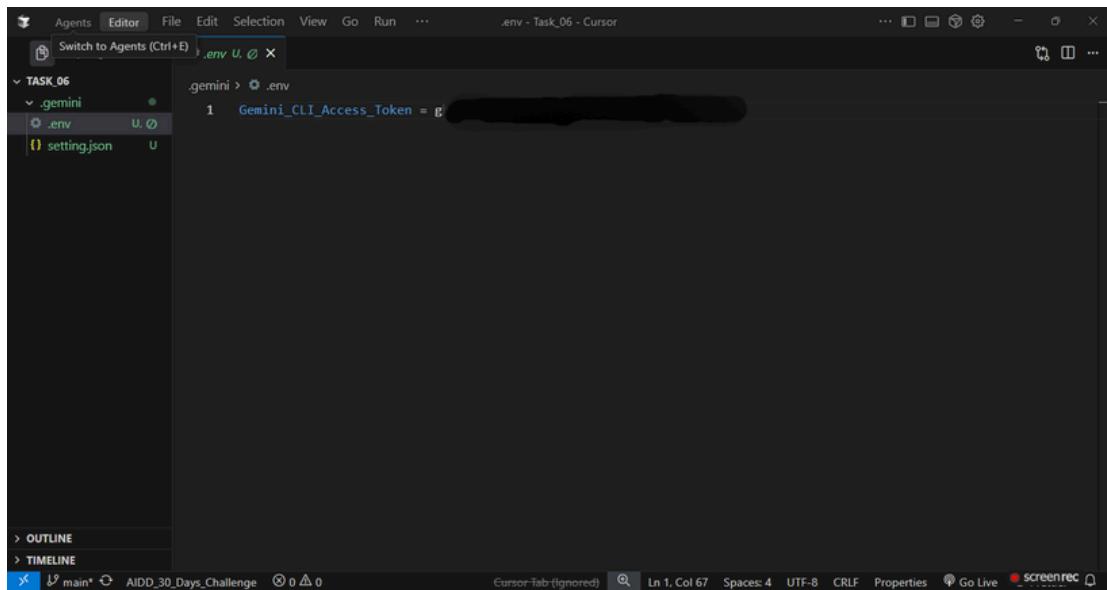
## Create this file:

bash

[Copy code](#)

```
~/.gemini/.env
```

**+ ADD**



A screenshot of a code editor window titled ".env - Task\_06 - Cursor". The left sidebar shows a project structure with "TASK\_06", ".gemini", ".env", and "setting.json". The main editor area contains the following .env file:

```
gemini > .env
1 Gemini_CLI_Access_Token = p[REDACTED]
```

The bottom status bar shows "Cursor Tab (ignored)" and "Ln 1, Col 67".

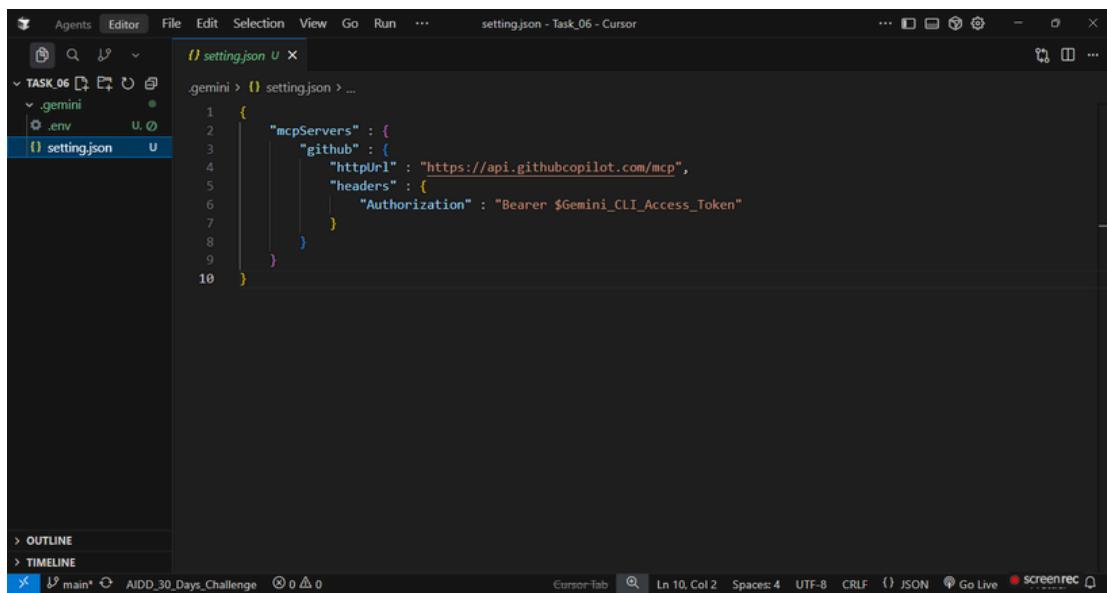
## ◆ Step 3 - Configure Gemini to Use GitHub MCP Server

 **Open or create:**



A screenshot of a terminal window titled "bash". It shows the command "~~/.gemini/settings.json" and a "Copy code" button.

 **Paste this:**



A screenshot of a code editor window titled "setting.json - Task\_06 - Cursor". The left sidebar shows a project structure with "TASK\_06", ".gemini", ".env", and "setting.json". The main editor area contains the following JSON configuration:

```
gemini > setting.json ...
1 {
2     "mcpServers": {
3         "github": {
4             "httpUrl": "https://api.githubcopilot.com/mcp",
5             "headers": {
6                 "Authorization": "Bearer $Gemini_CLI_Access_Token"
7             }
8         }
9     }
10 }
```

The bottom status bar shows "Cursor Tab" and "Ln 10, Col 2".

- ✓ No installation required
- ✓ Token auto-loads from .env
- ✓ Fast & easiest MCP setup

## ◆ Step 4 - Restart Gemini CLI

```
nginx
gemini
```

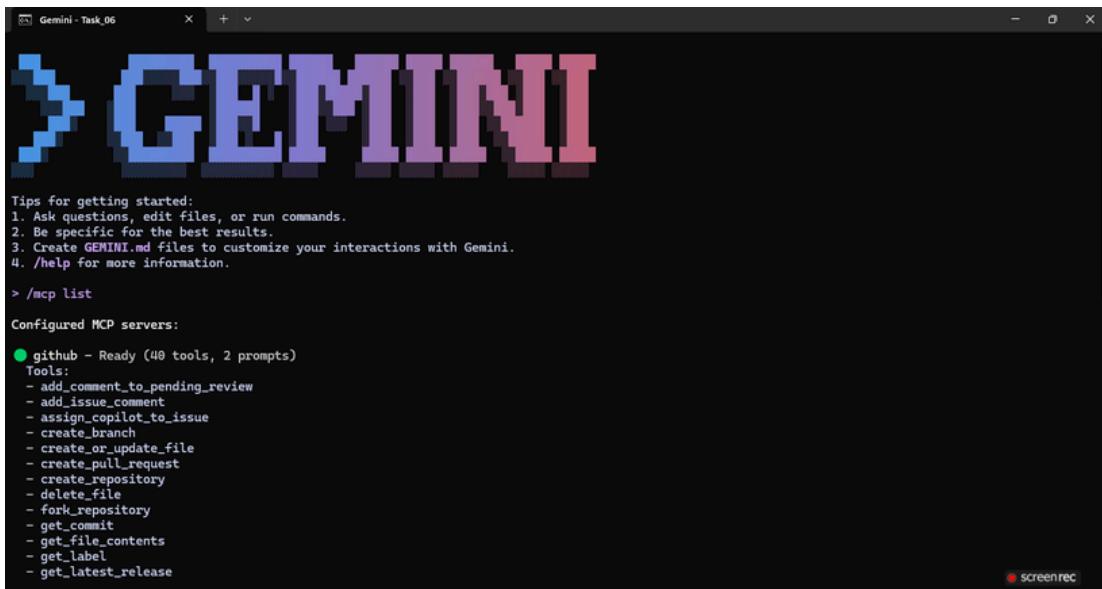
[Copy code](#)

## ◆ Step 5 - Verify Connection

```
bash
/mcp list
```

[Copy code](#)

### 🔧 Tools List

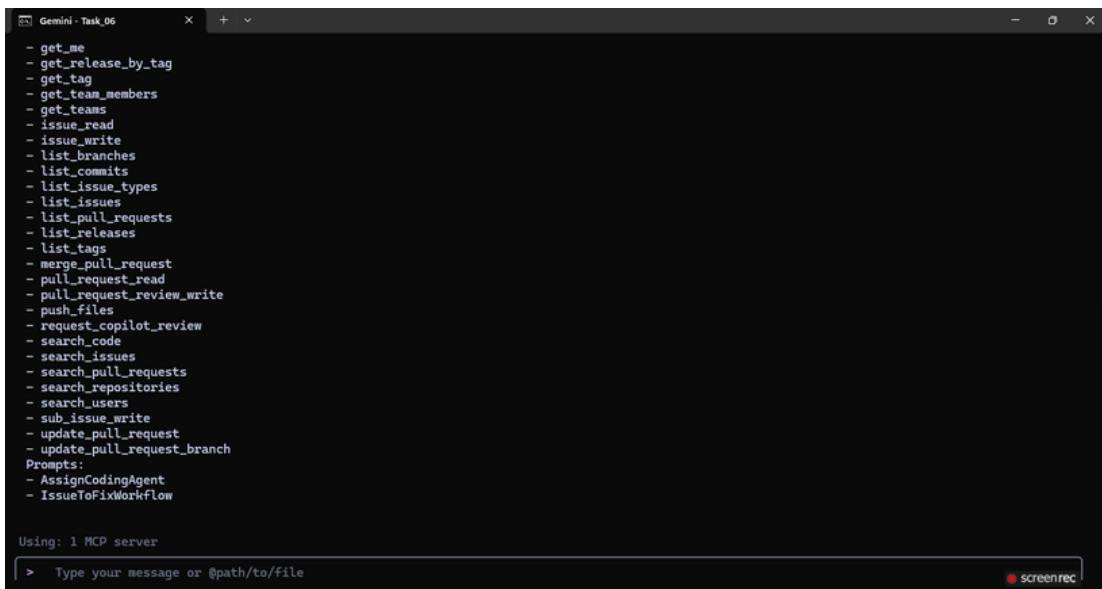


The screenshot shows a terminal window titled "Gemini - Task\_06". The title bar has a small "screenrec" icon. The main content of the terminal is as follows:

```
Tips for getting started:
1. Ask questions, edit files, or run commands.
2. Be specific for the best results.
3. Create GEMINI.md files to customize your interactions with Gemini.
4. /help for more information.

> /mcp list

Configured MCP servers:
● 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
```



The screenshot shows a terminal window titled "Gemini - Task\_06". The title bar has a small "screenrec" icon. The main content of the terminal is as follows:

```
- 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
- search_code
- search_issues
- search_pull_requests
- search_repositories
- search_users
- sub_issue_write
- update_pull_request
- update_pull_request_branch
Prompts:
- AssignCodingAgent
- IssueToFixWorkflow

Using: 1 MCP server
| > Type your message or @path/to/file
```

## ◆ Step 6 - Test the Server

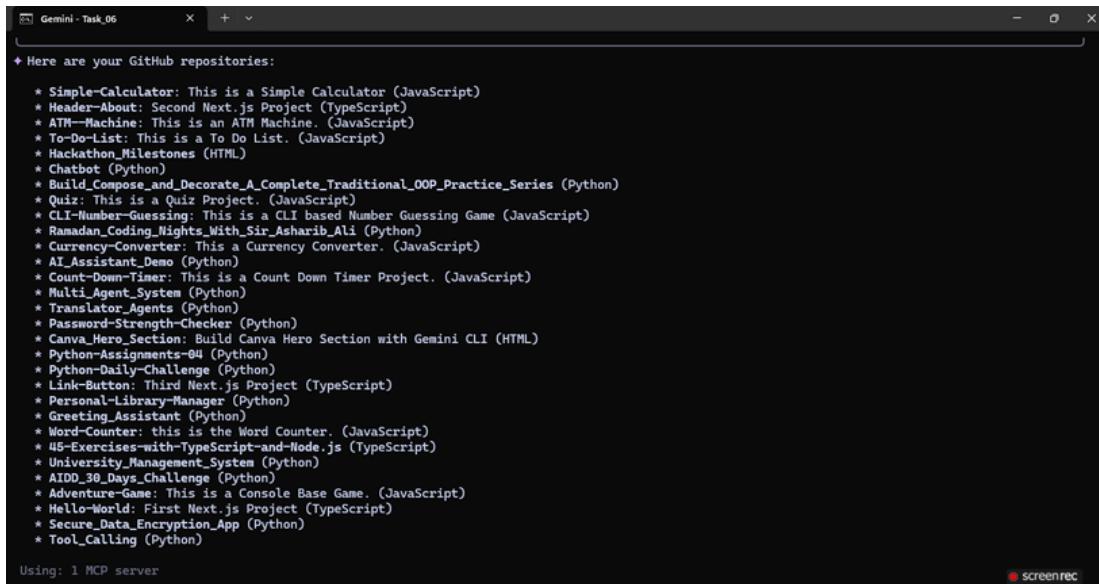
```
> List my GitHub repositories
+ I can list repositories if you provide your GitHub username. Alternatively, I can try to fetch your username using the get_me tool if you are
authenticated with GitHub. Would you like me to try that?

> get_me

✓ get_me (github MCP Server) {}

{"login": "tayyabahussain98", "id": 166198004, "profile_url": "https://github.com/tayyabahussain98", "avatar_url": "https://avatars.githubusercontent.com/u/166198004?v=4", "details": {"name": "Tayyaba Hussain", "hireable": true, "bio": "Web Developer, AI, Metaverse 3.0 Student", "public_repos": 36, "public_gists": 0, "followers": 3, "following": 25, "created_at": "2024-04-06T04:45:55Z", "updated_at": "2025-11-24T04:21:43Z"}}
```

🚀 Gemini shows your repos → MCP is fully connected ✓



The screenshot shows a terminal window titled "Gemini - Task\_06". The output lists numerous GitHub repositories, each preceded by a star symbol and a brief description. The repositories include Simple-Calculator, Header-About, ATM-Machine, To-Do-List, Hackathon\_Milestones, Chatbot, Build\_Compose\_and\_Decorate\_A\_Complete\_Traditional\_OOP\_Practice\_Series, Quiz, CLI-Number-Guessing, Ramadan\_Coding\_Nights\_With\_Sir\_Asharib\_Ali, Currency-Converter, AI\_Assistant\_Demo, Count-Down-Timer, Multi-Agent\_System, Translator\_Agents, Password-Strength-Checker, Canvas\_Hero\_Section, Python-Assessments-04, Python-Daily-Challenge, Link-Button, Personal-Library-Manager, Greeting\_Assistant, Word-Counter, 45-Exercises-with-TypeScript-and-Node.js, University\_Management\_System, AIDD\_30\_Days\_Challenge, Adventure-Game, Hello-World, First\_Next.js\_Project, Secure\_Data\_Encryption\_App, and Tool\_Calling. The terminal also indicates "Using: 1 MCP server" at the bottom.

```
+ Here are your GitHub repositories:
* Simple-Calculator: This is a Simple Calculator (JavaScript)
* Header-About: Second Next.js Project (TypeScript)
* ATM-Machine: This is an ATM Machine. (JavaScript)
* To-Do-List: This is a To Do List. (JavaScript)
* Hackathon_Milestones (HTML)
* Chatbot (Python)
* Build_Compose_and_Decorate_A_Complete_Traditional_OOP_Practice_Series (Python)
* Quiz: This is a Quiz Project. (JavaScript)
* CLI-Number-Guessing: This is a CLI based Number Guessing Game (JavaScript)
* Ramadan_Coding_Nights_With_Sir_Asharib_Ali (Python)
* Currency-Converter: This a Currency Converter. (JavaScript)
* AI_Assistant_Demo (Python)
* Count-Down-Timer: This is a Count Down Timer Project. (JavaScript)
* Multi-Agent_System (Python)
* Translator_Agents (Python)
* Password-Strength-Checker (Python)
* Canvas_Hero_Section: Build Canva Hero Section with Gemini CLI (HTML)
* Python-Assessments-04 (Python)
* Python-Daily-Challenge (Python)
* Link-Button: Third Next.js Project (TypeScript)
* Personal-Library-Manager (Python)
* Greeting_Assistant (Python)
* Word-Counter: this is the Word Counter. (JavaScript)
* 45-Exercises-with-TypeScript-and-Node.js (TypeScript)
* University_Management_System (Python)
* AIDD_30_Days_Challenge (Python)
* Adventure-Game: This is a Console Base Game. (JavaScript)
* Hello-World: First Next.js Project (TypeScript)
* Secure_Data_Encryption_App (Python)
* Tool_Calling (Python)

Using: 1 MCP server
```

## ⬆️ Submission Requirements

Students must submit:

✓ Screenshot of:

- ✓ .env file (token blurred)
- ✓ settings.json
- ✓ /mcp list result
- ✓ GitHub repo list output