

# AI-Driven Development - 30-Day Challenge-Task-6

## Task 6 - GitHub × MCP Integration (Hosted Method)

 Deadline: 48 Hours

Slot:(Friday 6–9 PM)

### 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/personal-access-tokens/new>

Generate a token with:

✓ repo (Read & Write)

Copy the token and save it safely.

#### ◆ Step 2 - Store Your Token Securely

Do NOT put the token directly into JSON.

Create this file:

```
bash                                         ⌂ Copy code

~/.gemini/.env
```

Add:

ini

 Copy code

```
GITHUB_MCP_PAT=your_token_here
```

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

Open or create:

bash

 Copy code

```
~/.gemini/settings.json
```

Paste this:

json

 Copy code

```
{
  "mcpServers": {
    "github": {
      "httpUrl": "https://api.githubcopilot.com/mcp/",
      "headers": {
        "Authorization": "Bearer $GITHUB_MCP_PAT"
      }
    }
  }
}
```

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

## ◆ Step 4 - Restart Gemini CLI

nginx

 Copy code

```
gemini
```

## ◆ Step 5 - Verify Connection

Run:

```
bash
/mcp list
Copy code
```

Expected:

● **github – Ready (90+ tools)**

If you see this → **SUCCESS**

## ◆ Step 6 - Test the Server

Ask:

“List my GitHub repositories”

If Gemini shows your repos → MCP is fully connected ✓

## ⚠ Troubleshooting

### ✗ Invalid Token

→ Create a new PAT

→ Must include: repo scope

### ✗ settings.json Error

Run:

```
bash
cat ~/.gemini/settings.json | jq .
Copy code
```

### ✗ MCP not connecting

Run:

```
nginx
```

 Copy code

```
gemini --debug "hello"
```

# ⬆️ Submission Requirements

**Students must submit:**

✓ **Screenshot of:**

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

📘 Prepared by: Asma Yaseen - Class Coordinator

👩‍💻 Supervised by: Sir Hamzah Syed