

Prompting is the New Scripting



Meet GenAI Script

Yohan Lasorsa

Principal Developer Advocate @ GDE for , OSS builder, Web tinkerer



@sinedied

/yohanlasorsa

```
$( '#hello' ).text( 'AgentHack 2025' );
```

```
$`Create an haiku about why JS is awesome`
```

```
$`Create an haiku about why JS is awesome`
```

Logic flows like streams,
Dynamic, boundless, it adapts–
JavaScript creates.

Not working #56

 Open



DevHero54 opened Mar 1, 2025 

So i followed the Setup Instructions, but I can't get it to work, can you help?

Create sub-issue 



fix array query params #27

[Edit](#)[Code](#)[Open](#)

youplaCS wants to merge 1 commit into [sinedied:main](#) from [youplaCS:fix_array_query_params](#)

[Conversation 1](#)[Commits 1](#)[Checks 0](#)[Files changed 54](#)[+524 -27](#)

youplaCS commented on Feb 21, 2025

First-time contributor

...

No description provided.



fix error with array query params

d8bc887

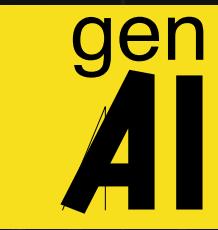
Reviewers

Suggestions

Copilot

Request

Still in progress? [Convert to draft](#)



GenAI Script

aka.ms/genaiscript

- Use with CLI, VS Code or GitHub Copilot
- Works with GitHub Models, OpenAI, Anthropic, Ollama...
- Built-in prompts, tools, agents and helpers

Syntax basics

```
// Prompt templates
$`Say hello to ${name}`;

// Set context
def("README", './README.md');
def("FILE", env.files, { glob: "**/*.js" });
def("WEBSITE", 'https://microsoft.com');

// Special formats
defImage("PICTURE", 'https://http.cat/403');
defData("DATA", csv, { format: "json" });
defDiff("DIFF", "cat", "dog");
defSchema("SCHEMA", MyObjectType);
```

Syntax basics

```
// Prompt templates
$`Say hello to ${name}`;

// Set context
def("README", './README.md');
def("FILE", env.files, { glob: "**/*.js" });
def("WEBSITE", 'https://microsoft.com');

// Special formats
defImage("PICTURE", 'https://http.cat/403');
defData("DATA", csv, { format: "json" });
defDiff("DIFF", "cat", "dog");
defSchema("SCHEMA", MyObjectType);
```

Syntax basics

```
// Prompt templates
$`Say hello to ${name}`;

// Set context
def("README", './README.md');
def("FILE", env.files, { glob: "**/*.js" });
def("WEBSITE", 'https://microsoft.com');

// Special formats
defImage("PICTURE", 'https://http.cat/403');
defData("DATA", csv, { format: "json" });
defDiff("DIFF", "cat", "dog");
defSchema("SCHEMA", MyObjectType);
```

Syntax basics

```
// Prompt templates
$`Say hello to ${name}`;

// Set context
def("README", './README.md');
def("FILE", env.files, { glob: "**/*.js" });
def("WEBSITE", 'https://microsoft.com');

// Special formats
defImage("PICTURE", 'https://http.cat/403');
defData("DATA", csv, { format: "json" });
defDiff("DIFF", "cat", "dog");
defSchema("SCHEMA", MyObjectType);
```

Syntax basics

```
// Prompt templates
$`Say hello to ${name}`;

// Set context
def("README", './README.md');
def("FILE", env.files, { glob: "**/*.js" });
def("WEBSITE", 'https://microsoft.com');

// Special formats
defImage("PICTURE", 'https://http.cat/403');
defData("DATA", csv, { format: "json" });
defDiff("DIFF", "cat", "dog");
defSchema("SCHEMA", MyObjectType);
```

Syntax basics

```
// Prompt templates
$`Say hello to ${name}`;

// Set context
def("README", './README.md');
def("FILE", env.files, { glob: "**/*.js" });
def("WEBSITE", 'https://microsoft.com');

// Special formats
defImage("PICTURE", 'https://http.cat/403');
defData("DATA", csv, { format: "json" });
defDiff("DIFF", "cat", "dog");
defSchema("SCHEMA", MyObjectType);
```

Syntax basics

```
// Prompt templates
$`Say hello to ${name}`;

// Set context
def("README", './README.md');
def("FILE", env.files, { glob: "**/*.js" });
def("WEBSITE", 'https://microsoft.com');

// Special formats
defImage("PICTURE", 'https://http.cat/403');
defData("DATA", csv, { format: "json" });
defDiff("DIFF", "cat", "dog");
defSchema("SCHEMA", MyObjectType);
```

Tools and agents

```
// Create tools
defTool(
  'random',
  'Generate a random number',
  async () => Math.random(),
);

// Create agents
defAgent(
  'math', // Also creates agent_math tool
  'Agent that does math operations',
  `You're a math expert.
  Answer the question using provided tools.`,
  { system: 'python', tools: ['random'] },
);
```

Tools and agents

```
// Create tools
defTool(
  'random',
  'Generate a random number',
  async () => Math.random(),
);

// Create agents
defAgent(
  'math', // Also creates agent_math tool
  'Agent that does math operations',
  `You're a math expert.
  Answer the question using provided tools.`,
  { system: 'python', tools: ['random'] },
);
```

Tools and agents

```
// Create tools
defTool(
  'random',
  'Generate a random number',
  async () => Math.random(),
);

// Create agents
defAgent(
  'math', // Also creates agent_math tool
  'Agent that does math operations',
  `You're a math expert.
  Answer the question using provided tools.`,
  { system: 'python', tools: ['random'] },
);
```

Agents = Prompt + Tools

Create a changelog of the latest changes

Use git tools to answer query

agent_git

LLM

git_tag, git_log

46c666c Add feature
95e5428 Update docs
30c528d Fix client bug

Get commits since last tag

LLM

Metadata and config

```
script({
  title: "LinkedIn post",
  description: "Generates a LinkedIn post",
  group: "socials",
  parameters: {
    topic: "GenAI with JavaScript",
    tone: "professional",
  },
  model: "large", // or "ollama:phi-4"
  temperature: 0.7,
  tools: ["git_list_commits"],
  system: ["system.files"],
});
```

Metadata and config

```
script({
  title: "LinkedIn post",
  description: "Generates a LinkedIn post",
  group: "socials",
  parameters: {
    topic: "GenAI with JavaScript",
    tone: "professional",
  },
  model: "large", // or "ollama:phi-4"
  temperature: 0.7,
  tools: ["git_list_commits"],
  system: ["system.files"],
});
```

Metadata and config

```
script({
  title: "LinkedIn post",
  description: "Generates a LinkedIn post",
  group: "socials",
  parameters: {
    topic: "GenAI with JavaScript",
    tone: "professional",
  },
  model: "large", // or "ollama:phi-4"
  temperature: 0.7,
  tools: ["git_list_commits"],
  system: ["system.files"],
});
```

Metadata and config

```
script({
  title: "LinkedIn post",
  description: "Generates a LinkedIn post",
  group: "socials",
  parameters: {
    topic: "GenAI with JavaScript",
    tone: "professional",
  },
  model: "large", // or "ollama:phi-4"
  temperature: 0.7,
  tools: ["git_list_commits"],
  system: ["system.files"],
});
```

Metadata and config

```
script({
  title: "LinkedIn post",
  description: "Generates a LinkedIn post",
  group: "socials",
  parameters: {
    topic: "GenAI with JavaScript",
    tone: "professional",
  },
  model: "large", // or "ollama:phi-4"
  temperature: 0.7,
  tools: ["git_list_commits"],
  system: ["system.files"],
});
```

Metadata and config

```
script({
  title: "LinkedIn post",
  description: "Generates a LinkedIn post",
  group: "socials",
  parameters: {
    topic: "GenAI with JavaScript",
    tone: "professional",
  },
  model: "large", // or "ollama:phi-4"
  temperature: 0.7,
  tools: ["git_list_commits"],
  system: ["system.files"],
});
```

Using MCP tools

```
script({
  mcpServers: {
    playwright: {
      command: "npx",
      args: ["-y", "@playwright/mcp"],
    },
  },
});
```

Using MCP tools

```
script({
  mcpAgentServers: {
    playwright: {
      description: "An agent that uses playwright to run browser commands.",
      command: "npx",
      args: ["-y", "@playwright/mcp"],
      instructions: "Use the playwright tools to navigate in a browser."
    },
  },
});
```

Expose scripts as MCP tools

```
# VS Code command
npx -y genaiscript mcp --groups my-mcp-scripts --cwd '${workspaceFolder}'
```



```
// Claude config
{
  "mcpServers": {
    "my-tools": {
      "type": "stdio",
      "command": "npx",
      "args": ["-y", "genaiscript", "mcp", "--groups", "my-mcp-scripts"],
      "env": {
        // Optional
        "GENAISCRIP_DEFAULT_MODEL": "<your_model_config>",
      }
    }
  }
}
```

MCP tools

Audio Transcription

Image & Video Input

RAG

Structured Outputs

@agentic tools

Browser control

Multi-Agents



Jupyter Notebooks

PromptFoo evals

Office, PDF, XML, CSV, HTML...

Agent Memory

TypeScript

Teams Integration

User Input

Vector Search

Semantic Caching

Containers

JSON schema

Jinja Templates

Zod



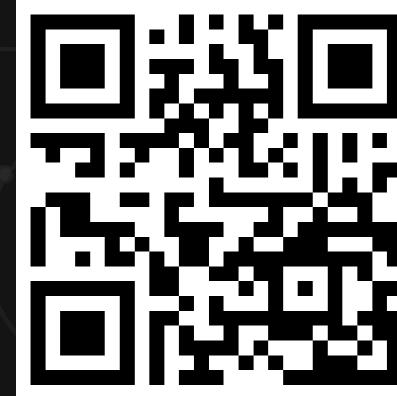
It's a developer tool



It's (only) **a developer tool**

Get started

- aka.ms/genaiscript
- aka.ms/genaiscript/talk
- aka.ms/genaiscript/samples



Generative AI for Beginners

aka.ms/genai-js-course

A JavaScript Adventure

