Do more with GitHub and Azure Logic Apps

Bryan Soltis
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2023 Atlanta Developer Conference

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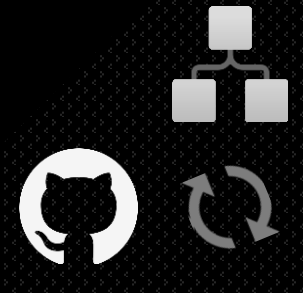
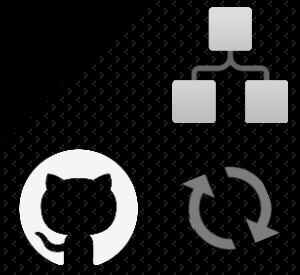
80s Random Pop Culture Question 1



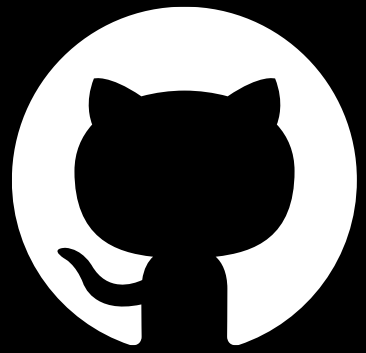
What we're going to do

- GitHub & Logic Apps Overview
- GitHub Webhooks
  - Activities
  - Payloads
- Azure Logic App Connectors
- Demos
- Some other stuff

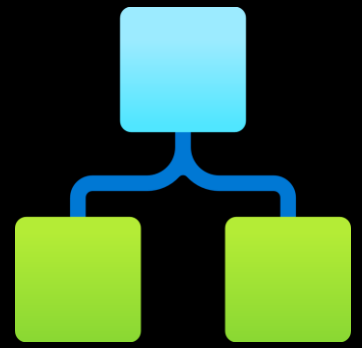


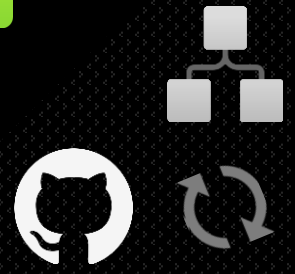
GitHub & Logic Apps

- GitHub
  - Repos
  - Actions
  - REST API
  - Webhooks
  - Data!



- Azure Logic Apps
  - Workflows
  - Rapid development
  - Connectors
    - Built-In
    - Standard
    - Enterprise
  - Integrations
  - Do stuff!

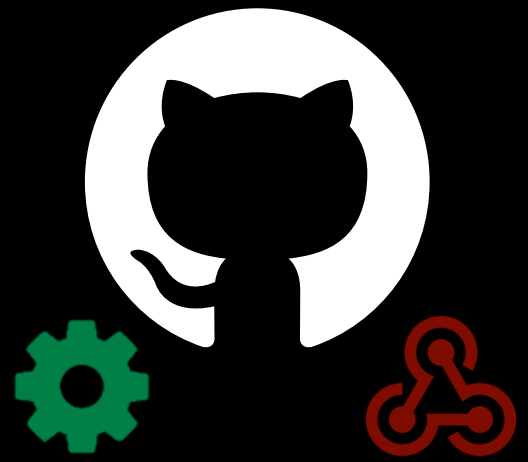




GitHub API & Webhooks

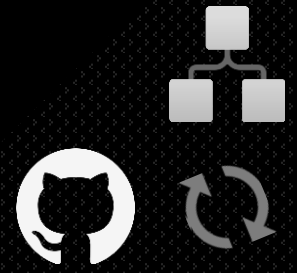
API

- Full GitHub Details
- Automations/Integrations
- Go get/put/do something!



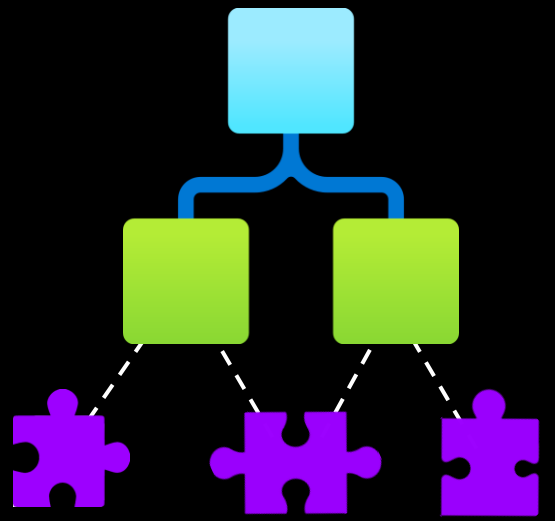
Webhooks

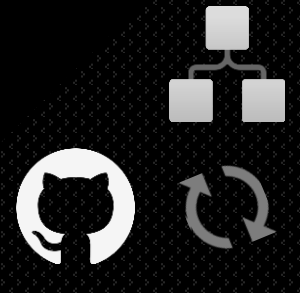
- Activities
- Payloads
- When something happens, do something else!



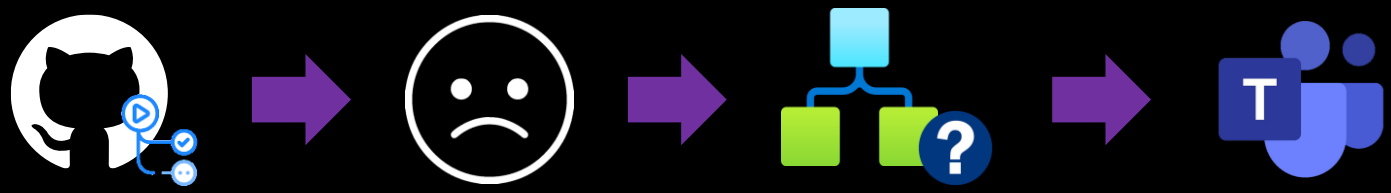
Azure Logic App Connectors

- API Wrappers
- 1000+
- Microsoft, Enterprise Companies, Custom
- Triggers vs Actions
- Easier than coding, and faster
- GitHub Connector
- Azure Function integration

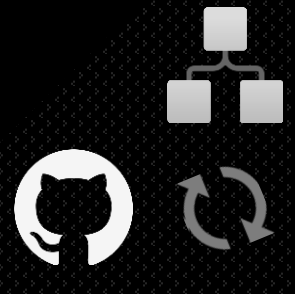




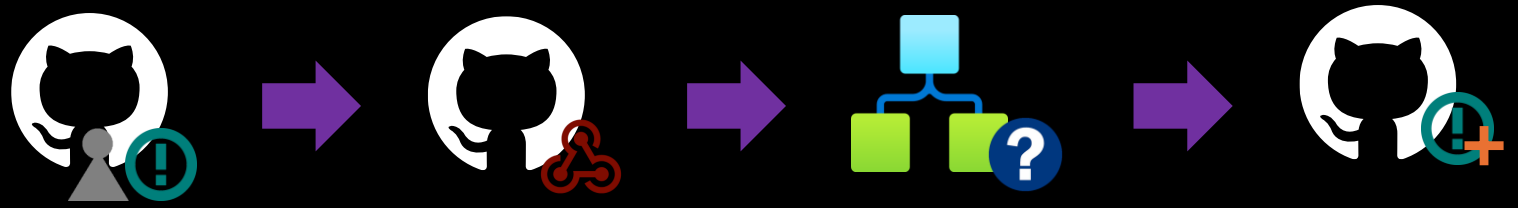
Demo: Alerting Teams on GitHub Activity



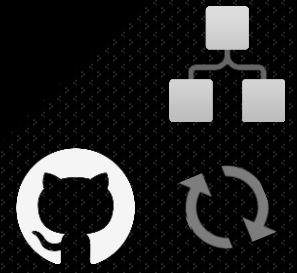
- GitHub Action is triggered
- GitHub Action failed ☹
- Evaluate Action run results
- Post to Teams channel



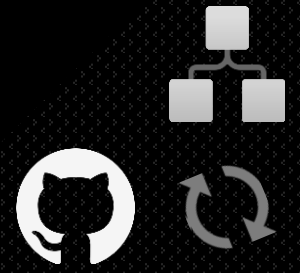
Demo: Evaluating New Issues



- User creates new issue in GitHub project
- GitHub webhooks posts to Azure Logic App
- Azure Logic App evaluates issue details
- If applicable, Azure Logic App updates GitHub issue to assign to user

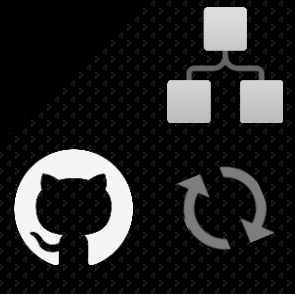


80s Random Pop Culture Question 2



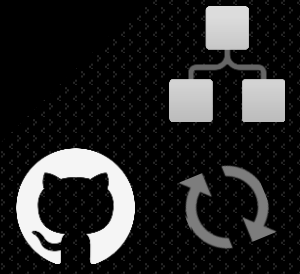
Demo: Logging GitHub Metrics

- Once a day, access GitHub REST API
- Retrieve traffic metrics
- Log metrics to Azure storage for archival



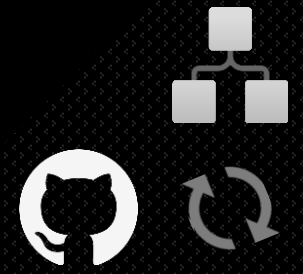
More Ideas?

- Download GitHub Action logs (API)
- Monitor a repository size and alert admins (API)
- Automatically publish Milestone completions (Webhook)
- Automatically post about new Releases/Packages (Webhook)
- Communicate with users who fork a repository (Webhook)
- Create a GitHub Team Discussion when an issue is created (Webhook)



Learn More

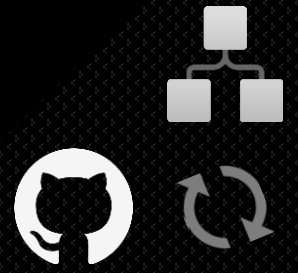
- About webhooks - GitHub Docs
  https://docs.github.com/en/webhooks/about-webhooks
- List of all Logic Apps connectors | Microsoft Learn
  https://learn.microsoft.com/en-us/connectors/connector-reference/connector-reference-logicapps-connectors
- GitHub - Connectors | Microsoft Learn
  https://learn.microsoft.com/en-us/connectors/github/
- GitHub REST API documentation
  https://docs.github.com/en/rest
- Monitoring GitHub Actions with Azure Logic Apps
  https://soltisweb.com/blog/detail/2023-06-01-monitoring-github-actions-with-azure-logic-apps



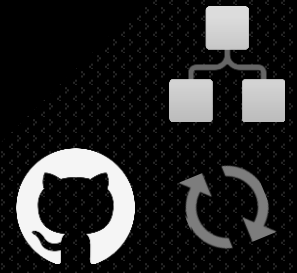
Shameless Plug

- Azure Naming Tool
  - Defining / Managing Azure Naming Conventions
  - .NET 7 Blazor Server Application
  - REST API
  - 100% Open Source
  - FREE!

https://aka.ms/AzureNamingTool



80s Random Pop Culture Question 3



Me

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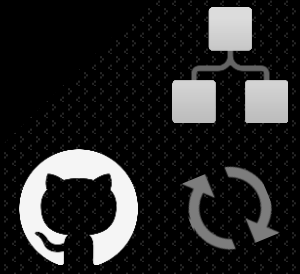

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Knowing Is half The Battle