Manual Workflow

A Manual Workflow in GitHub Actions is a type of workflow that is triggered explicitly by a user through the GitHub UI or API. Unlike automatic workflows triggered by events such as pull requests or pushes to the repository, manual workflows provide control over when the workflow executes, allowing users to initiate them when needed.

Features

- **User Control:** Manual workflows allow users to trigger actions at their discretion, providing flexibility in workflow execution.
- **Explicit Activation:** Workflows are initiated explicitly through the GitHub UI or API, ensuring deliberate execution based on user input.
- **Custom Inputs:** Users can provide inputs when triggering the workflow, allowing for dynamic configuration based on specific requirements.
- **UI Integration:** Manual workflows are integrated into the GitHub UI, allowing users to initiate them conveniently through the repository interface.
- **Versatility:** Manual workflows can be used for various purposes, including deployment tasks, testing procedures, or any action that requires manual intervention.

Usage

To use a Manual Workflow in your GitHub repository, follow these steps:

- **Create Workflow File:** Define a workflow YAML file (e.g., manual_workflow.yml) in the `.github/workflows` directory of your repository.

```yaml
name: Manual workflow

# Controls when the action will run. Workflow runs when manually triggered
using the UI
# or API.
on:
  workflow_dispatch:
    # Inputs the workflow accepts.
    inputs:
      name:
        # Friendly description to be shown in the UI instead of 'name'
        description: 'Person to greet'
        # Default value if no value is explicitly provided
        default: 'World'
        # Input has to be provided for the workflow to run
        required: true
        # The data type of the input
        type: string

  # A workflow run is made up of one or more jobs that can run sequentially or
  in parallel
```

```
jobs:
  # This workflow contains a single job called "greet"
  greet:
    # The type of runner that the job will run on
    runs-on: ubuntu-latest

    # Steps represent a sequence of tasks that will be executed as part of
the job
    steps:
    # Runs a single command using the runners shell
    - name: Send greeting
      run: echo "Hello ${{ inputs.name }}"
```

- **Define Workflow**: Specify the workflow details, including the name and triggers.

```
name: Manual Workflow

on:
  workflow_dispatch:
    inputs:
      name:
        description: 'Person to greet'
        default: 'World'
        required: true
        type: string
```

- **Define Jobs:** Define the jobs that comprise the workflow. In a manual workflow, jobs are configured to execute specific tasks or actions.

```
jobs:
  greet:
    runs-on: ubuntu-latest
    steps:
      - name: Send greeting
        run: echo "Hello ${{ inputs.name }}"
```

- **Customize Workflow:** Customize the workflow as needed, specifying additional jobs, steps, or configurations based on your requirements.

- **Commit and Push:** Save the changes to the workflow file and commit them to your repository. The workflow is now ready to be triggered manually through the GitHub UI or API.