

TDS-GA2-Q6-Notes (by moon)

Answer <https://github.com/moonejs/TDS-GA-2-Notes>

How to Add a GitHub Action (Step-by-Step Guide)

Goal

Add a basic GitHub Action to automatically run when code is pushed to the repository.

This guide assumes:

- The repository already exists on GitHub
- You are doing this directly from the GitHub website

Step 1: Open Your Repository

1. Go to GitHub.
2. Open your repository.
3. Click on the **Actions** tab at the top.

Step 2: Create a New Workflow

If this is your first workflow:

- GitHub will show setup suggestions.
- Click **Simple workflow** (safest option).
- Then click **Configure**.

If workflows already exist:

- Click **New workflow**
- Then choose **Simple workflow**
- Click **Configure**

Step 3: Understand Where the File Is Stored

GitHub automatically creates the file inside:

```
.github/workflows/
```

Example:

```
.github/workflows/ci.yml
```

This is required. GitHub only detects workflows inside this folder.

Step 4: Replace the YAML with a Simple Working Example

```
# This is a basic workflow to help you get started with Actions

name: CI
-----
-----
  - name: **Rollnumber**
    run: echo "Hello, World!"
```

Just add your roll number at the end

Step 5: Commit the Workflow

Scroll down to the bottom of the page.

Select:

- Commit directly to the main branch

Click:

- Commit changes

Step 6: Trigger the Workflow

Now:

1. Go to the **Code** tab.
2. Make a small change (for example, edit README).

3. Commit that change.

This triggers the workflow.

Step 7: View the Workflow Running

1. Click the **Actions** tab.
2. You will see your workflow running.
3. Click on it.
4. Click the job to see logs.

If successful, you will see a green check mark.

What Just Happened?

When you pushed code:

1. GitHub detected a push event.
2. It read the workflow file.
3. It created a virtual machine.
4. It executed the defined steps.
5. It showed the result in the Actions tab.

Important Notes

- YAML is indentation-sensitive (use 2 spaces, not tabs).
- Workflows must be inside `.github/workflows/`.
- If your default branch is not `main`, adjust accordingly.

Final Understanding

GitHub Actions allows you to automate tasks.

A workflow:

- Is triggered by an event
- Runs jobs
- Each job runs steps
- Steps execute commands on a runner

You have now successfully added automation to your repository.