The following is the link for github action to login against a Docker registry

<https://github.com/docker/login-action>

You may need to [manage write and read access of GitHub Actions](https://docs.github.com/en/packages/managing-github-packages-using-github-actions-workflows/publishing-and-installing-a-package-with-github-actions#upgrading-a-workflow-that-accesses-ghcrio) for repositories in the container settings.

You can also use a [personal access token (PAT)](https://docs.github.com/en/github/authenticating-to-github/creating-a-personal-access-token) with the [appropriate scopes](https://docs.github.com/en/packages/getting-started-with-github-container-registry/migrating-to-github-container-registry-for-docker-images#authenticating-with-the-container-registry).

-> henceforth, I use job-level permissions to set write permissions for package

- name: Log in to the Container registry

uses: docker/login-action@v3.2.0

with:

registry: ${{ env.REGISTRY }}

username: ${{ github.actor }}

password: ${{ secrets.GITHUB\_TOKEN }}

to install poetry action for github action:

<https://github.com/snok/install-poetry>

<https://stackoverflow.com/questions/71076272/install-poetry-with-github-actions-poetry-command-not-found-cannot-add-poetry>

github action configuration for pyproject.toml

<https://stackoverflow.com/questions/76805338/github-action-configuration-for-pyproject-toml-in-subfolder>

<https://github.com/actions/setup-python/issues/542>

pushing images to github packages

<https://docs.github.com/en/actions/publishing-packages/publishing-docker-images#publishing-images-to-github-packages>

deploying:  
<https://docs.github.com/en/actions/deployment/about-deployments/deploying-with-github-actions>