Reference:
https://davelms.medium.com/build-your-docker-images-automatically-when-pushing-new-code-to-github-394f4c1679cc (open as a guest to view the page)

Use the tweet browser as an example for Approach#1
Github: https://github.com/juejuew/Census_tweet_browser
Dockerhub: https://hub.docker.com/r/juejue64807761/twibrowser_fromgit

Prerequisites:

1. GitHub account (register here: https://github.com/)
Within your GitHub account, create a repository with a Dockerfile and any additional source code. To create a Dockerfile based on the "Containerization" paper, you can refer to: https://github.com/johanngb/rep, https://github.com/gjhunt/containerize/blob/main/mwes/docker_mwe2/Dockerfile, and https://github.com/juejuew/Census_tweet_browser/blob/master/Dockerfile

2. Docker Hub account (register here: https://hub.docker.com/)

Next, follow steps 1 to 6 on

https://davelms.medium.com/build-your-docker-images-automatically-when-pushing-new-code-to-github-394f4c1679cc
You can also watch https://www.youtube.com/watch?v=SzzwFauxK98 for instructions.

Now you have created your image from the github repo.
You can pull the image from dockerhub to your host, and you may consider using volumes to better persisting data in the Docker containers (For more information, read https://docs.docker.com/storage/ or watch https://www.youtube.com/watch?v=VOK06Q4QqvE for an instruction).

You can also use Approach#2 to build Docker images automatically when pushing new code to GitHub if you find this approach is more convenient.