

Assignment 2 Document

CI section

1. For part one, our team choose to use github actions, therefore there is no need to reupload our code elsewhere. The result of which will be demonstrated below.

2&3. For this part, we wrote two files to port our backend to docker.

`./backend/Dockerfile` and `./github/workflows/docker-image.yml`

Which you can find in the repo, the Dockerfile in the `./backend` directory contains instructions for Docker to build an image for the backend application, including setting up the environment, installing dependencies, copying application code, and defining the command to run the app. In parallel, the `docker-image.yml` file in the `./github/workflows` directory is a GitHub Actions workflow configuration that automates the process of building, testing, and deploying this Docker image to a container registry whenever code is pushed to the repository or a pull request is opened. This CI/CD pipeline ensures that the application is consistently built and deployed, maintaining integration and deployment efficiency. By doing this, after we pushed anything to the main branch, jobs will run in github actions, similar to the following.

The screenshot shows a GitHub Actions workflow run for the file `docker-image.yml`, triggered by a push to the `dev` branch. The workflow consists of two jobs: `build` and `deploy`. The `build` job took 1m 17s and the `deploy` job took 27s. Both jobs are marked as successful with green checkmarks. The status bar at the top indicates the workflow was triggered via push 3 hours ago, is in a 'Success' state, has a total duration of 2m 6s, and a billable time of 3m.

Triggered via push 3 hours ago	Status	Total duration	Billable time	Artifacts
Googlogogo pushed -> 1fa74ba dev	Success	2m 6s	3m	—

docker-image.yml
on: push

build (1m 17s) — deploy (27s)

After which, you can see it is deployed on the docker hub.

The screenshot shows the Docker Hub repository page for the repository `googlogogo / split-the-bill-backend`. The repository is public and contains an image. It has 0 stars and 68 forks. The last push was about 12 hours ago. The page includes a search bar, a 'Create repository' button, and a 'Scout inactive' status.

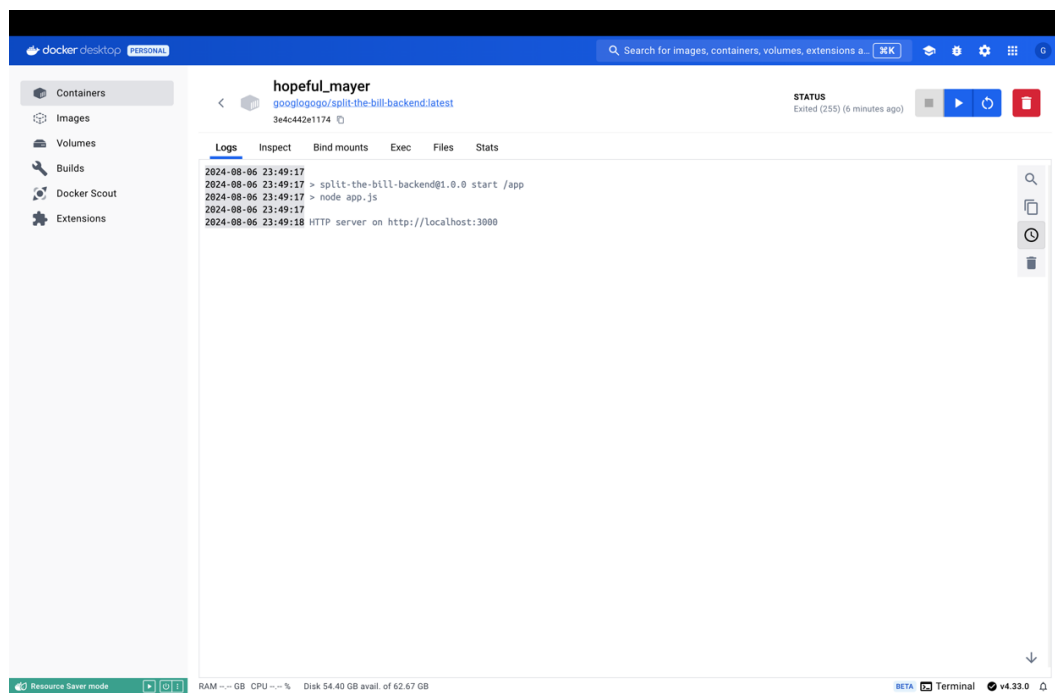
docker hub Explore Repositories Organizations Search Docker Hub

googlogogo Search by repository name All Content Create repository

googlogogo / split-the-bill-backend
Contains: image • Last pushed: about 12 hours ago

0 stars 68 forks Public Scout inactive

And we can pull it from the local docker and run it. It is successfully running:



CD section:

Our team attempt to deploy our backend using Azure.