Task 5- Create CI/CD pipeline to build code and docker image generation.

Overview:

Continuous Integration and continuous delivery/deployment are a set of practices adopted by software development teams to streamline the development process by automating certain processes thereby increasing frequency of releases and quality of final product.

Setup:

For this task GitHub actions was used to create the workflow that takes care of building the docker image.

Repository link: git clone https://github.com/NikhilKumar2444/Kaiburr-Task-5.git

Details:

The workflow runs on the main branch, any commit to the main branch will result in the docker image getting built.

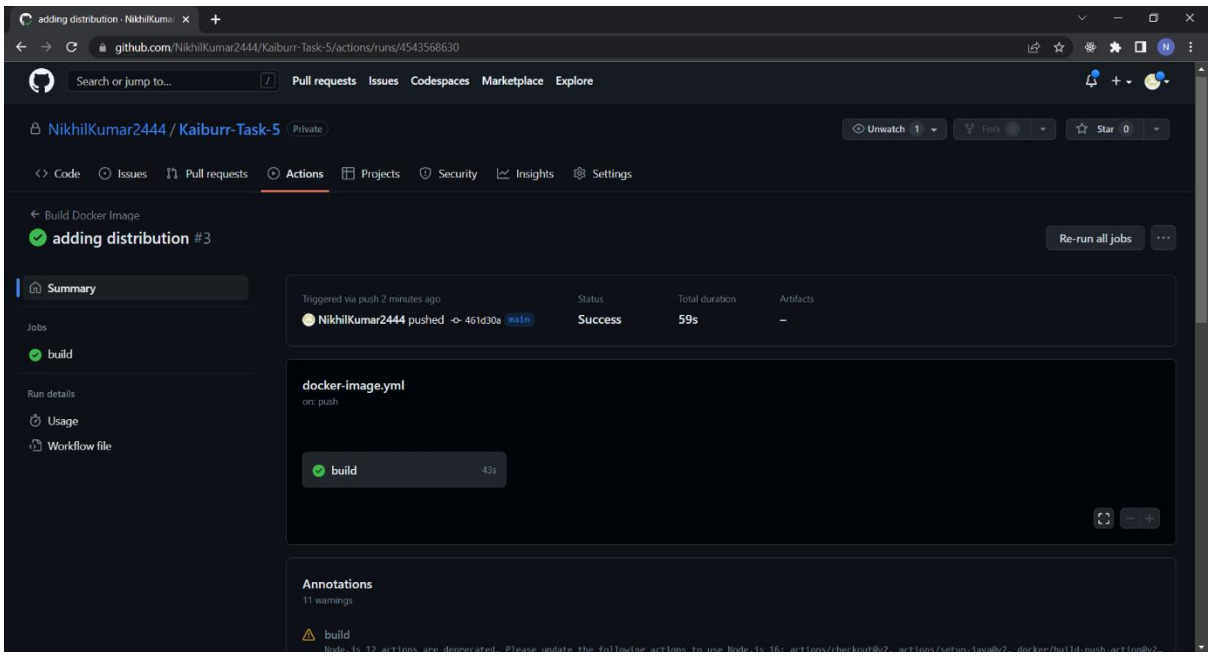
Ubuntu latest is used as a base image as it provides a reliable environment for running build and development work. It ensures same dependencies, libraries and system configurations are used consistently across different machines and environments reducing risk of compatibility issues.

A Dockerfile is created that is used by the pipeline to perform the build of docker image.

docker/build-push-action@v2 command is used to start building the docker image.

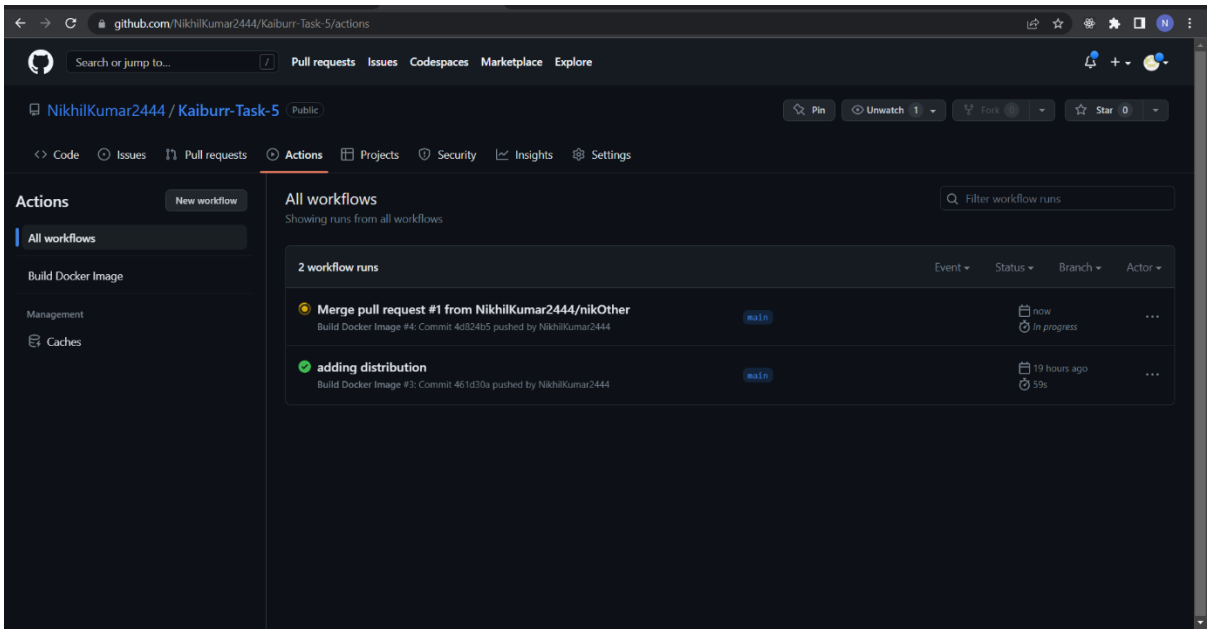
Output screenshots

Successful build.

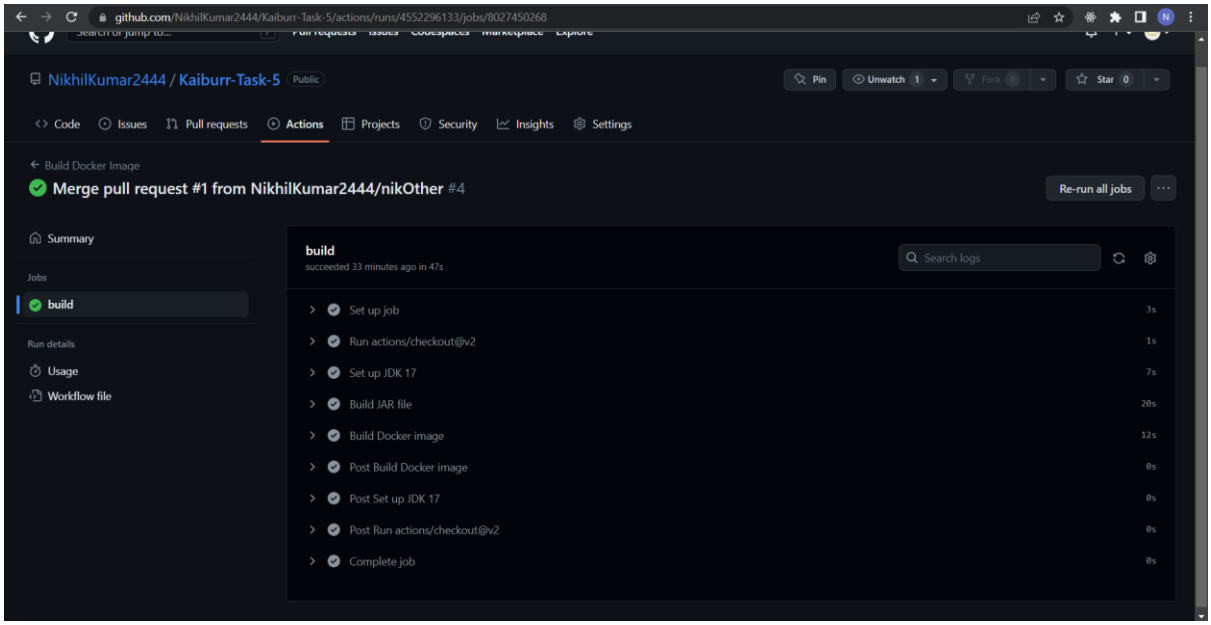


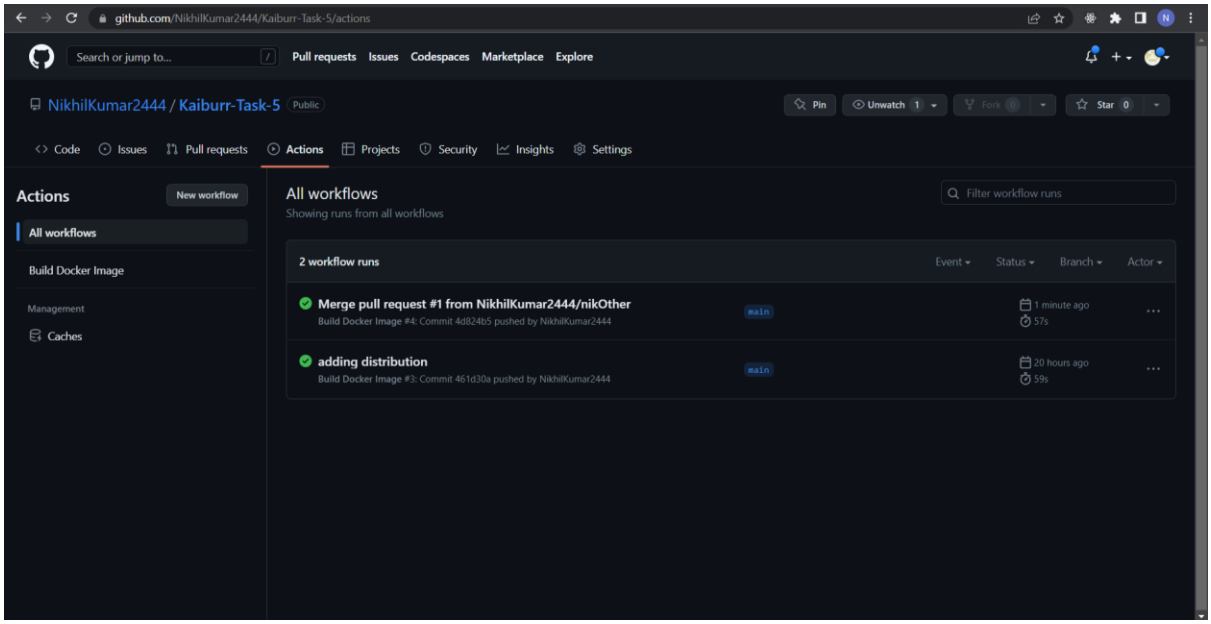
Separate branches help keep the most stable version of the application in production. Updates, bug fixes, feature addition and much more happens on these separate branches. After successfully pushing to the main branch, the pipeline takes care of the remaining work.

A separate branch called “nikOther” is where we make changes to the application. After these get pushed to the “main” the workflow runs.



Success full Build:




github.com/NikhilKumar2444/Kaiburr-Task-5/actions
Search or jump to...
Pull requests
Issues
Codespaces
Marketplace
Explore
NikhilKumar2444 / Kaiburr-Task-5
Public
Pin
Unwatch 1
Fork 0
Star 0
Code
Issues
Pull requests
Actions
Projects
Security
Insights
Settings
Actions
New workflow
All workflows
Build Docker Image
Management
Caches
All workflows
Showing runs from all workflows
Filter workflow runs
2 workflow runs
Event
Status
Branch
Actor
Merge pull request #1 from NikhilKumar2444/nikOther
Build Docker Image #4: Commit 4d824b5 pushed by NikhilKumar2444
main
1 minute ago
57s
adding distribution
Build Docker Image #3: Commit 461d30a pushed by NikhilKumar2444
main
20 hours ago
59s