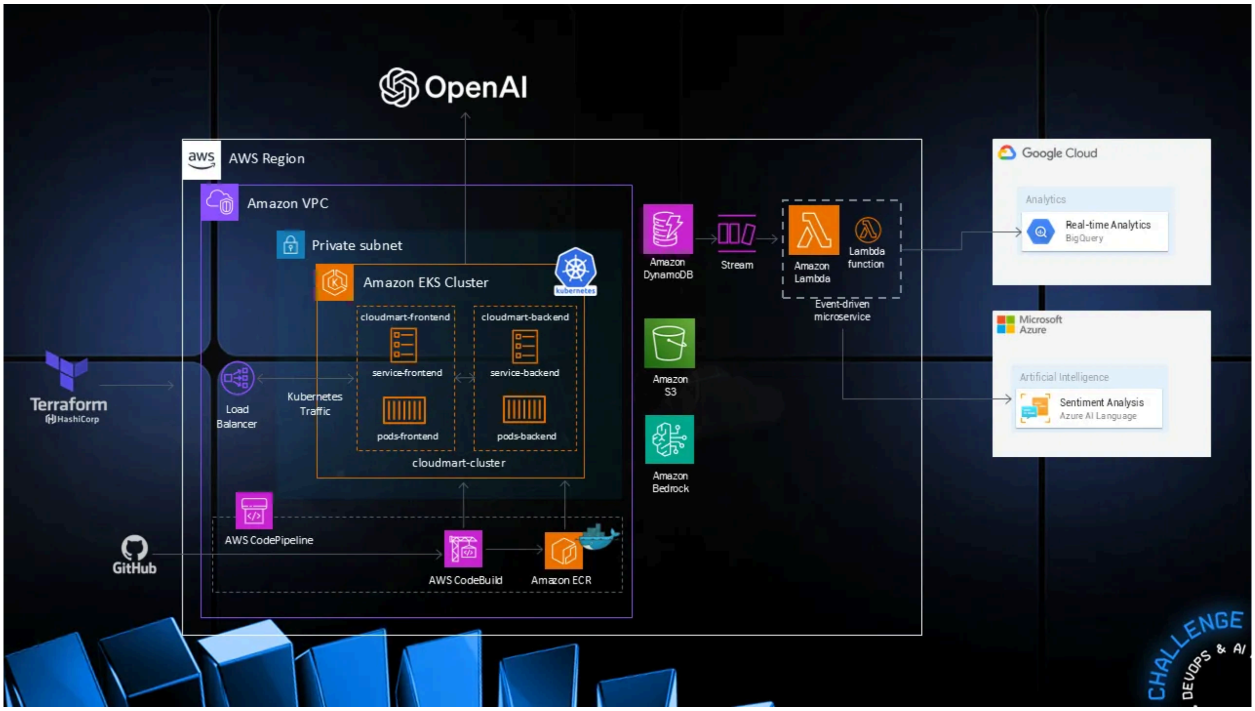
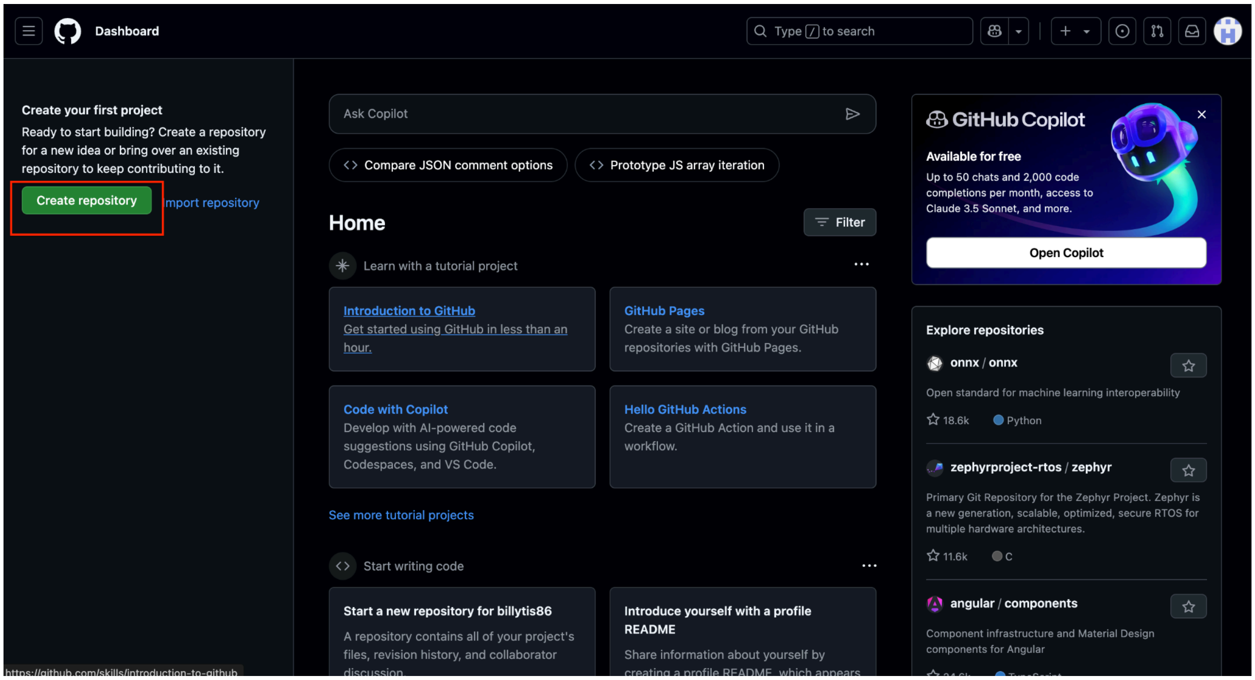
CLOUD MART ON AUTOPILOT



In this project the objective was to automate any update or code deployment using the AWS Code Pipeline, Github and ECR-EKS.

STEP 1:CI/CD Pipeline Configuration

I Created a free account on GitHub and then created a new repository on GitHub called cloudmart.


Dashboard
Type / to search
Ask Copilot
Compare JSON comment options
Prototype JS array iteration
Filter
Open Copilot
See more tutorial projects
https://github.com/skills/introduction-to-github

Create your first project

Ready to start building? Create a repository for a new idea or bring over an existing repository to keep contributing to it.

Create repository   Import repository

Home

Learn with a tutorial project

Introduction to GitHub
Get started using GitHub in less than an hour.

GitHub Pages
Create a site or blog from your GitHub repositories with GitHub Pages.

Code with Copilot
Develop with AI-powered code suggestions using GitHub Copilot, Codespaces, and VS Code.

Hello GitHub Actions
Create a GitHub Action and use it in a workflow.

Start writing code

Start a new repository for billytis86
A repository contains all of your project's files, revision history, and collaborator discussion...

Introduce yourself with a profile README
Share information about yourself by creating a profile README, which appears...

GitHub Copilot
Available for free
Up to 50 chats and 2,000 code completions per month, access to Claude 3.5 Sonnet, and more.

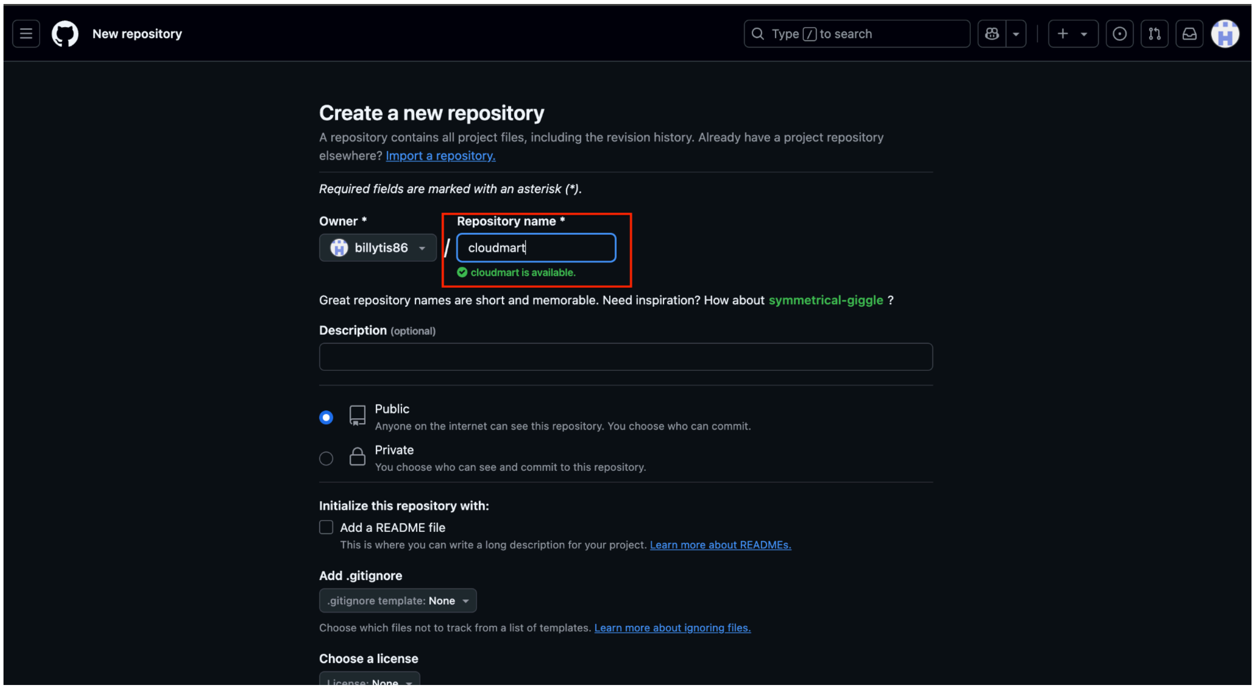
Explore repositories

onnx / onnx
Open standard for machine learning interoperability
18.6k · Python

zephyrproject-rtos / zephyr
Primary Git Repository for the Zephyr Project. Zephyr is a new generation, scalable, optimized, secure RTOS for multiple hardware architectures.
11.6k · C

angular / components
Component infrastructure and Material Design components for Angular

cd challenge-day2/frontend <Run GitHub steps>



Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? Import a repository.

Required fields are marked with an asterisk (*).

Owner * billytis86 / Repository name * cloudmart

cloudmart is available.

Great repository names are short and memorable. Need inspiration? How about symmetrical-giggle ?

Description (optional)

● Public
Anyone on the internet can see this repository. You choose who can commit.

○ Private
You choose who can see and commit to this repository.

Initialize this repository with:

□ Add a README file
This is where you can write a long description for your project. Learn more about READMEs.

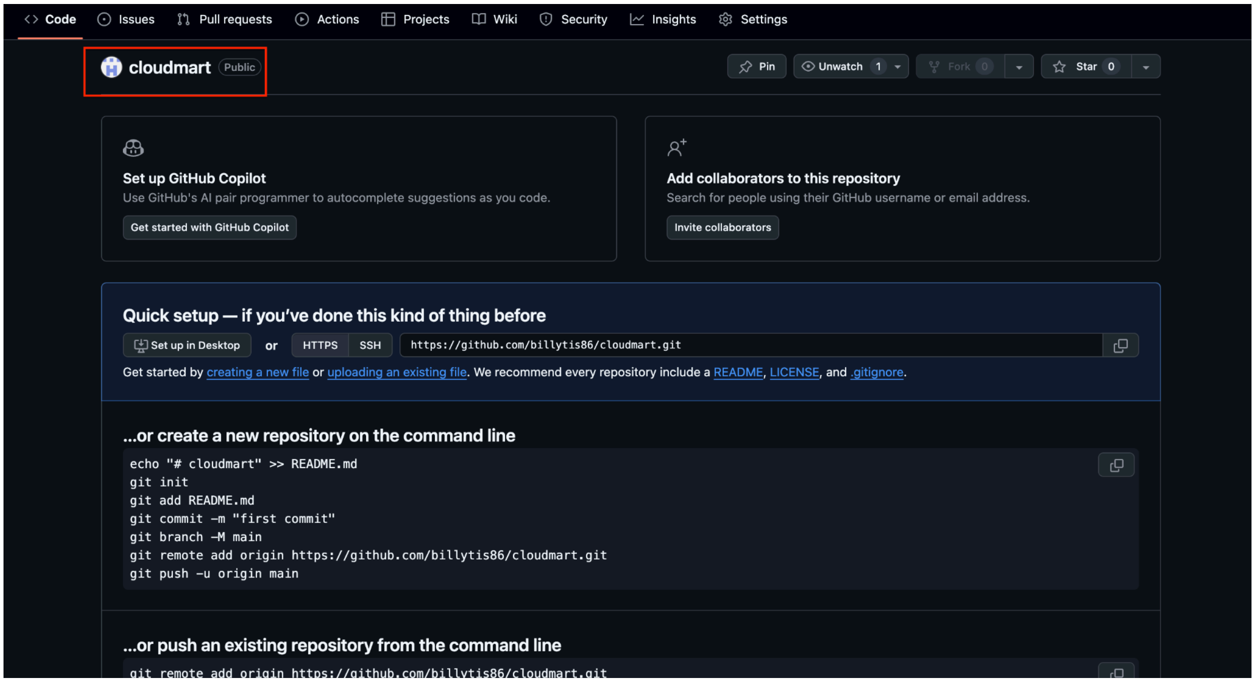
Add .gitignore

.gitignore template: None

Choose which files not to track from a list of templates. Learn more about ignoring files.

Choose a license

License: None



Set up GitHub Copilot

Use GitHub's AI pair programmer to autocomplete suggestions as you code.

Add collaborators to this repository

Search for people using their GitHub username or email address.

Quick setup — if you've done this kind of thing before

```
https://github.com/billytis86/cloudmart.git
```

Get started by creating a new file or uploading an existing file. We recommend every repository include a README, LICENSE, and .gitignore.

...or create a new repository on the command line

```
echo "# cloudmart" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/billytis86/cloudmart.git
git push -u origin main
```

...or push an existing repository from the command line

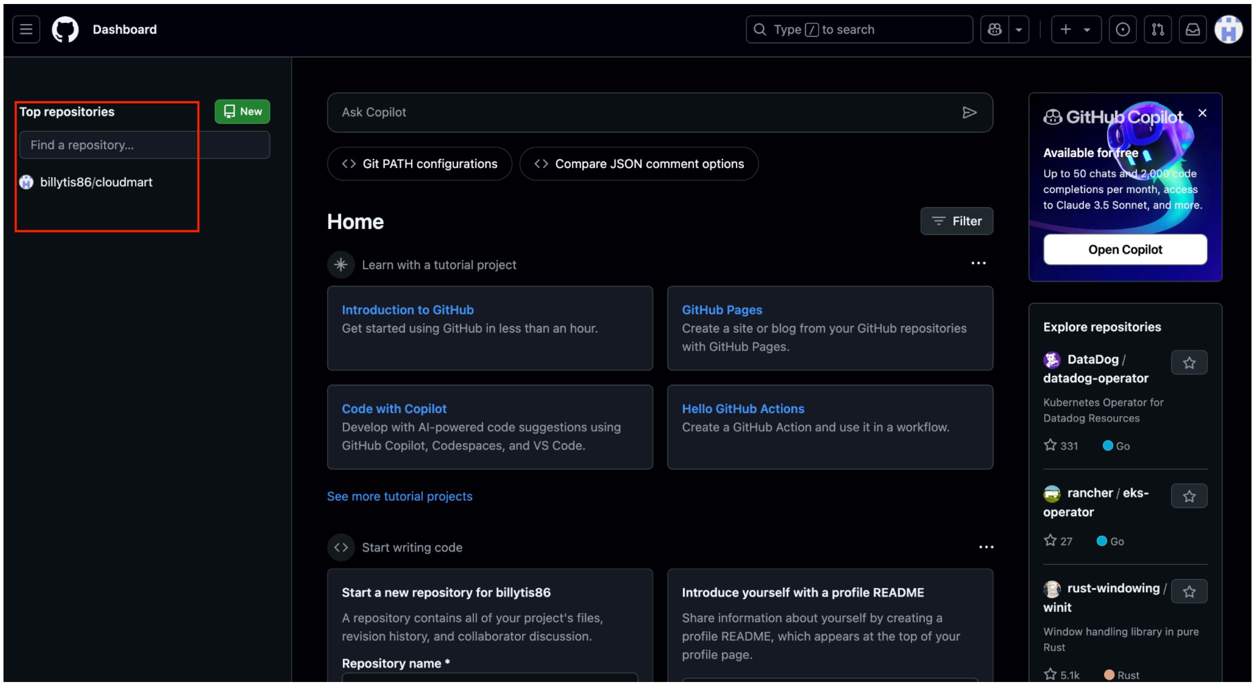
```
git remote add origin https://github.com/billytis86/cloudmart.git
```

Then i went to the aws console to connect to my EC2 instance workstation and navigate into the right directory:

cd challenge-day2/frontend

Then i started to configure Github repository using these commands from Github in the EC2 Instance:

echo "# cloudmart" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/billytis86/cloudmart.git
git push -u origin main



Get started using GitHub in less than an hour.

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Create a GitHub Action and use it in a workflow.

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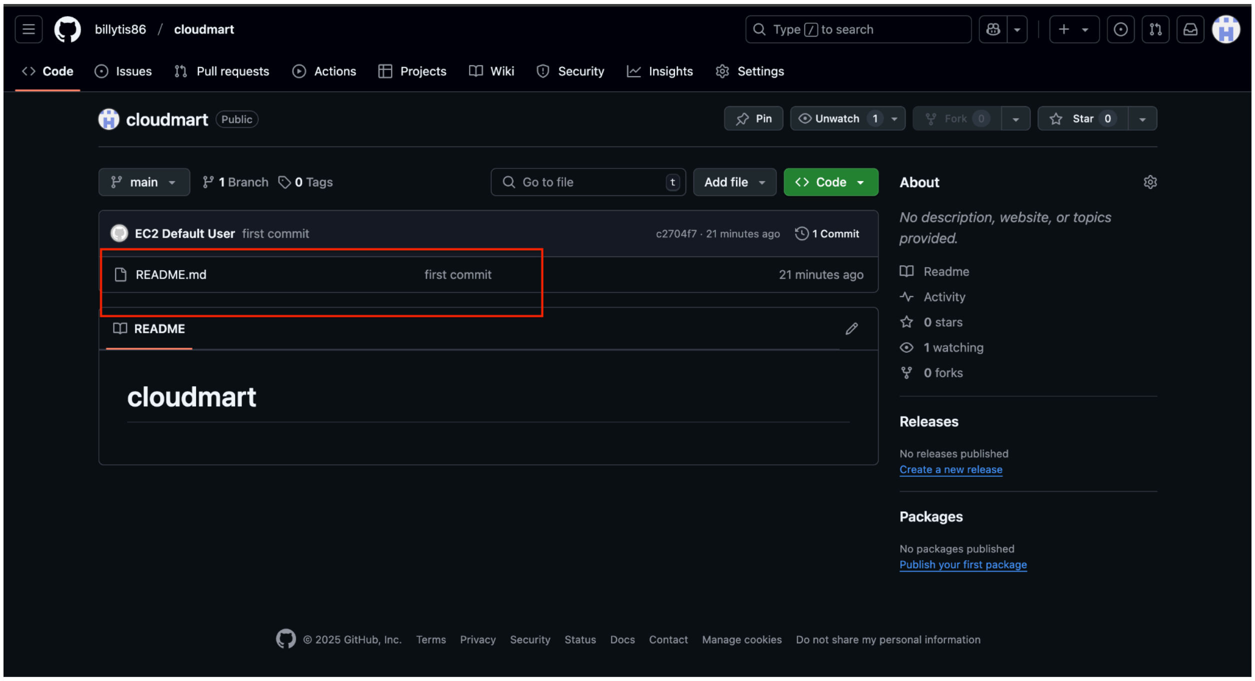
Up to 50 chats and 2,000 code completions per month, access to Claude 3.5 Sonnet, and more.

Kubernetes Operator for Datadog Resources

Window handling library in pure Rust



EC2 Default User first commit c2704f7 · 21 minutes ago 1 Commit

README.md first commit 21 minutes ago

No description, website, or topics provided.

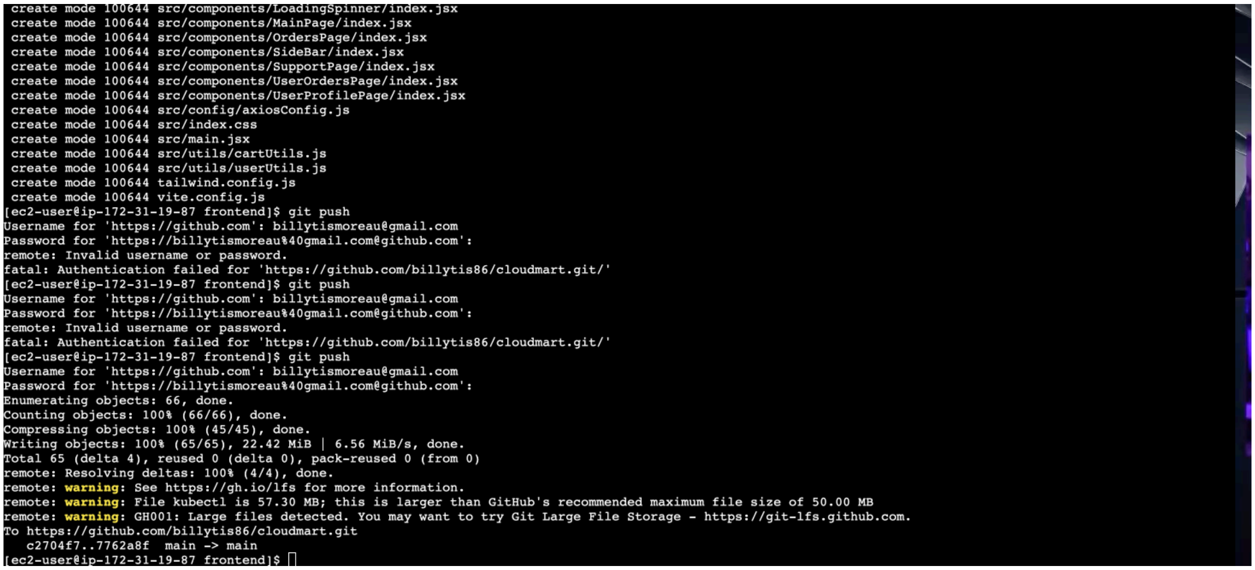
No releases published

No packages published

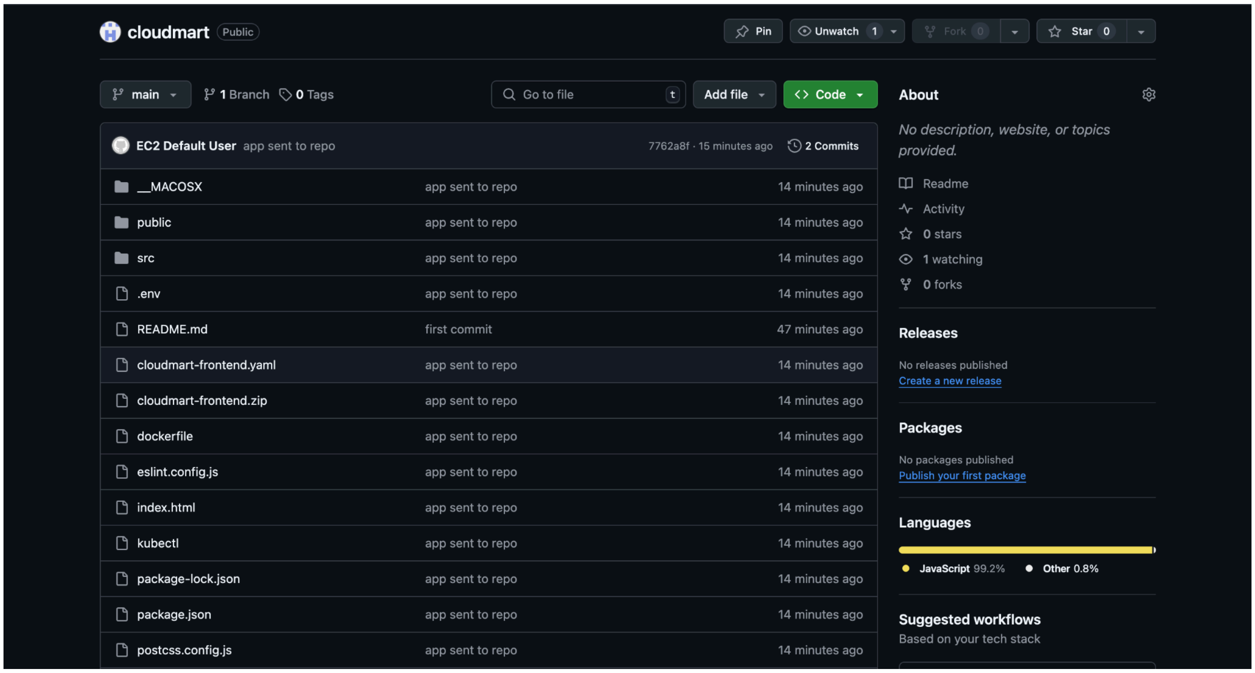
The repository is configured with the text file

Then i started to push all the changes in the CloudMart application source code to GitHub with these commands:

git status git add -A git commit -m "app sent to repo" git push



```
 create mode 100644 src/components/LoadingSpinner/index.jsx
 create mode 100644 src/components/MainPage/index.jsx
 create mode 100644 src/components/OrdersPage/index.jsx
 create mode 100644 src/components/SideBar/index.jsx
 create mode 100644 src/components/SupportPage/index.jsx
 create mode 100644 src/components/UserOrdersPage/index.jsx
 create mode 100644 src/components/UserProfilePage/index.jsx
 create mode 100644 src/config/axiosConfig.js
 create mode 100644 src/index.css
 create mode 100644 src/main.jsx
 create mode 100644 src/utils/cartUtils.js
 create mode 100644 src/utils/userUtils.js
 create mode 100644 tailwind.config.js
 create mode 100644 vite.config.js
[ec2-user@ip-172-31-19-87 frontend]$ git push
Username for 'https://github.com': billytismoreau@gmail.com
Password for 'https://billytismoreau%40gmail.com@github.com':
remote: Invalid username or password.
fatal: Authentication failed for 'https://github.com/billytis86/cloudmart.git/'
[ec2-user@ip-172-31-19-87 frontend]$ git push
Username for 'https://github.com': billytismoreau@gmail.com
Password for 'https://billytismoreau%40gmail.com@github.com':
remote: Invalid username or password.
fatal: Authentication failed for 'https://github.com/billytis86/cloudmart.git/'
[ec2-user@ip-172-31-19-87 frontend]$ git push
Username for 'https://github.com': billytismoreau@gmail.com
Password for 'https://billytismoreau%40gmail.com@github.com':
Enumerating objects: 66, done.
Counting objects: 100% (66/66), done.
Compressing objects: 100% (45/45), done.
Writing objects: 100% (65/65), 22.42 MiB | 6.56 MiB/s, done.
Total 65 (delta 4), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (4/4), done.
remote: warning: See https://gh.io/lfs for more information.
remote: warning: File kubectl is 57.30 MB; this is larger than GitHub's recommended maximum file size of 50.00 MB
remote: warning: GH001: Large files detected. You may want to try Git Large File Storage - https://git-lfs.github.com.
To https://github.com/billytis86/cloudmart.git
   c2704f7..7762a8f  main -> main
[ec2-user@ip-172-31-19-87 frontend]$ 
```



EC2 Default User app sent to repo 7762a8f · 15 minutes ago 2 Commits

__MACOSX	app sent to repo	14 minutes ago
public	app sent to repo	14 minutes ago
src	app sent to repo	14 minutes ago
.env	app sent to repo	14 minutes ago
README.md	first commit	47 minutes ago
cloudmart-frontend.yaml	app sent to repo	14 minutes ago
cloudmart-frontend.zip	app sent to repo	14 minutes ago
dockerfile	app sent to repo	14 minutes ago
eslint.config.js	app sent to repo	14 minutes ago
index.html	app sent to repo	14 minutes ago
kubectl	app sent to repo	14 minutes ago
package-lock.json	app sent to repo	14 minutes ago
package.json	app sent to repo	14 minutes ago
postcss.config.js	app sent to repo	14 minutes ago

About

No description, website, or topics provided.

Readme
Activity
0 stars
1 watching
0 forks

Releases

No releases published
Create a new release

Packages

No packages published
Publish your first package

Languages

● JavaScript 99.2% ● Other 0.8%

Suggested workflows
Based on your tech stack

All the files have been pushed to the GitHub Repository.

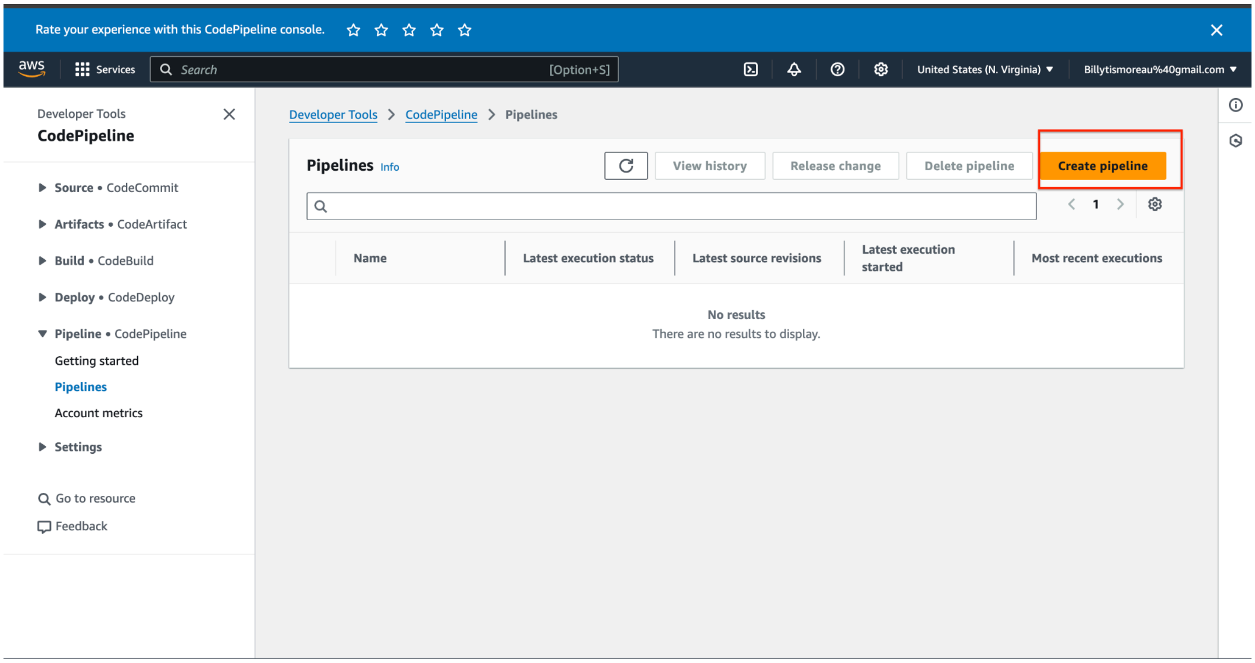
STEP 2 CREATE A NEW PIPELINE

Now that the Application has been pushed to GitHub its time to Create a pipeline so we can automate the Docker image creation and the deployment.

Therefore I went to the aws console to create an AWS Codepipeline:

Here are the steps i took:

- Access AWS CodePipeline.
- Start the 'Create pipeline' process.
- Name: `cloudmart-cicd-pipeline`
- Use the GitHub repository `cloudmart-application` as the source.
- Add the 'cloudmartBuild' project as the build stage.
- Add the 'cloudmartDeploy' project as the deployment stage.



Configure AWS CodeBuild to Build the Docker Image

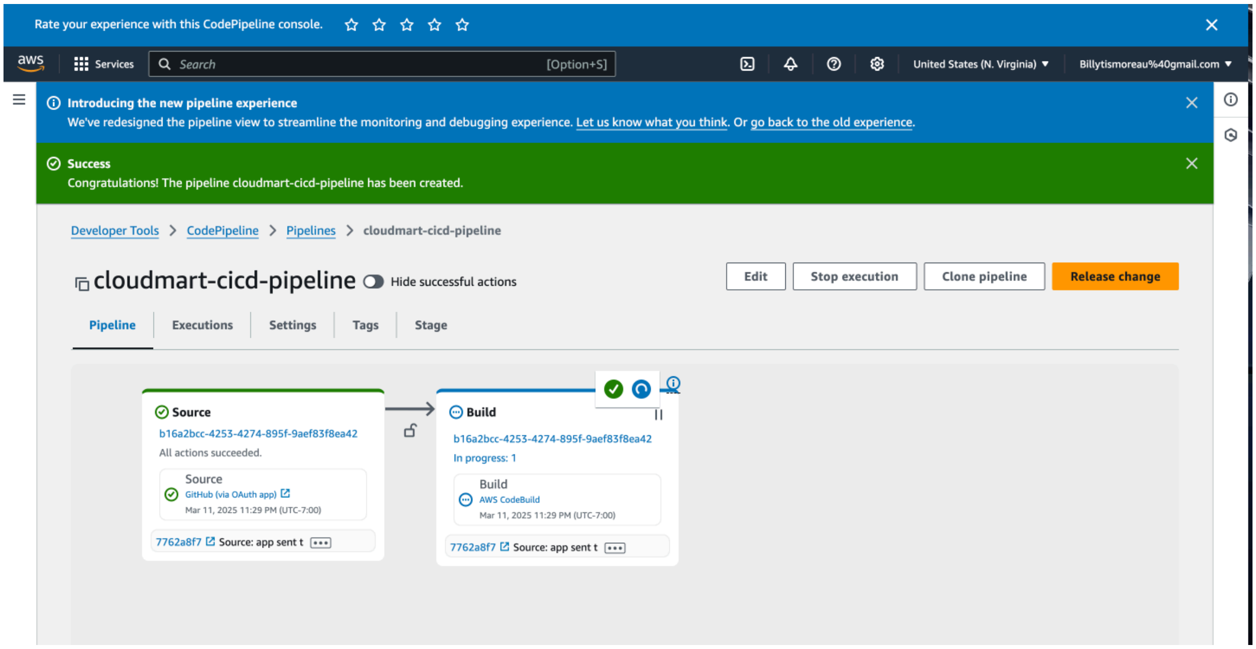
In this step i had to create a build project in codepipeline in order to create the image here are the steps i took:

- Gave the project a name (f`cloudmartBuild`).
- Connected it to my existing GitHub repository (`cloudmart-application`).
- **Image: amazonlinux2-x86_64-standard:4.0**
- Configure the environment to support Docker builds. Enable "Enable this flag if you want to build Docker images or want your builds to get elevated privileges"
- Add the environment variable **ECR_REPO** with the ECR repository URI.
- For the build specification, use the following `buildspec.yml`:

Here are the specifics for that image build:

```
version: 0.2
phases:
  install:
    runtime-versions:
      docker: 20
  pre_build:
    commands:
      - echo Logging in to Amazon ECR...
      - aws --version
      - REPOSITORY_URI=$ECR_REPO
      - aws ecr get-login-password --region us-east-1 | docker login --username AWS --password-stdin 082706928695.dkr.ecr.us-east-1.amazonaws.com
  build:
    commands:
      - echo Build started on `date`
      - echo Building the Docker image...
      - docker build -t $REPOSITORY_URI:latest .
      - docker tag $REPOSITORY_URI:latest $REPOSITORY_URI:$CODEBUILD_RESOLVED_SOURCE_VERSION
  post_build:
    commands:
      - echo Build completed on `date`
      - echo Pushing the Docker image...
      - docker push $REPOSITORY_URI:latest
      - docker push $REPOSITORY_URI:$CODEBUILD_RESOLVED_SOURCE_VERSION
      - export imageTag=$CODEBUILD_RESOLVED_SOURCE_VERSION
      - printf '[{\"name\":\"cloudmart-app\",\"imageUri\":\"%s\"}]' $REPOSITORY_URI:$imageTag > imagedefinitions.json
      - cat imagedefinitions.json
      - ls -l
env:
  exported-variables: ["imageTag"]
artifacts:
  files:
    - imagedefinitions.json
    - cloudmart-frontend.yaml
```

The pipeline been created



Rate your experience with this CodePipeline console. ☆ ☆ ☆ ☆ ☆

aws Services Search [Option+S] United States (N. Virginia) ▾ Billytismoreau%40gmail.com ▾

Introducing the new pipeline experience
We've redesigned the pipeline view to streamline the monitoring and debugging experience. Let us know what you think. Or go back to the old experience.

Success
Congratulations! The pipeline cloudmart-cicd-pipeline has been created.

Developer Tools > CodePipeline > Pipelines > cloudmart-cicd-pipeline

cloudmart-cicd-pipeline ○ Hide successful actions

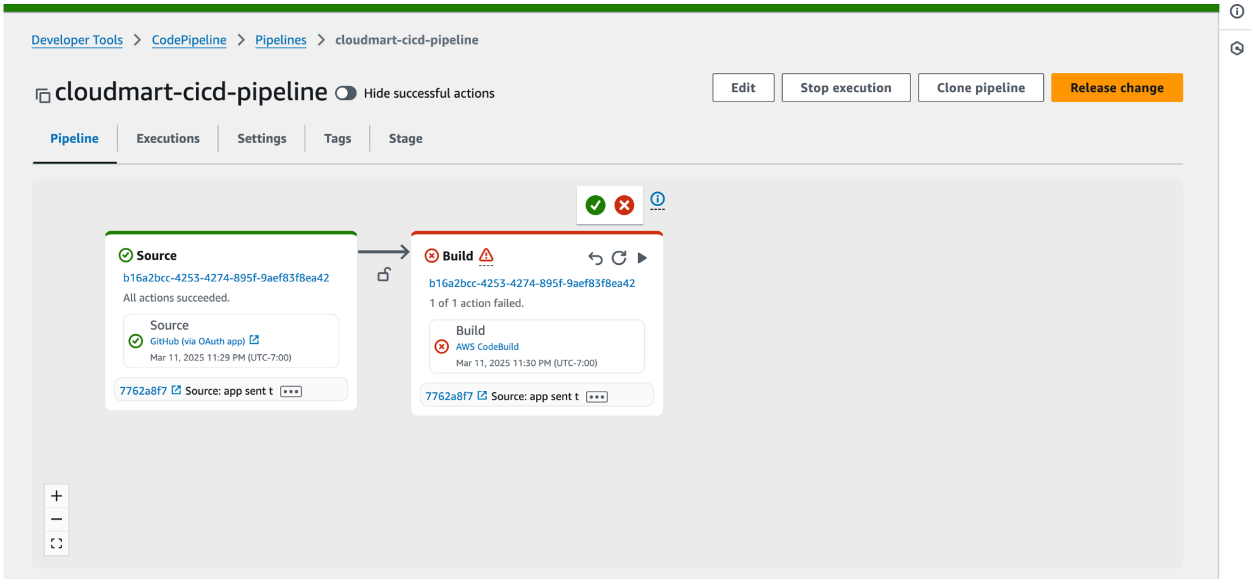
Edit | Stop execution | Clone pipeline | Release change

Pipeline | Executions | Settings | Tags | Stage

✓ Source
b16a2bcc-4253-4274-895f-9aef83f8ea42
All actions succeeded.
Source
✓ GitHub (via OAuth app)
Mar 11, 2025 11:29 PM (UTC-7:00)
7762a8f7 Source: app sent t ...

Build
b16a2bcc-4253-4274-895f-9aef83f8ea42
In progress: 1
Build
AWS CodeBuild
Mar 11, 2025 11:29 PM (UTC-7:00)
7762a8f7 Source: app sent t ...

However an error came out because i needed to give the permission for the “cloudmartbuild” role to to access to the ECR repository.



Developer Tools > CodePipeline > Pipelines > cloudmart-cicd-pipeline

cloudmart-cicd-pipeline ○ Hide successful actions

Edit | Stop execution | Clone pipeline | Release change

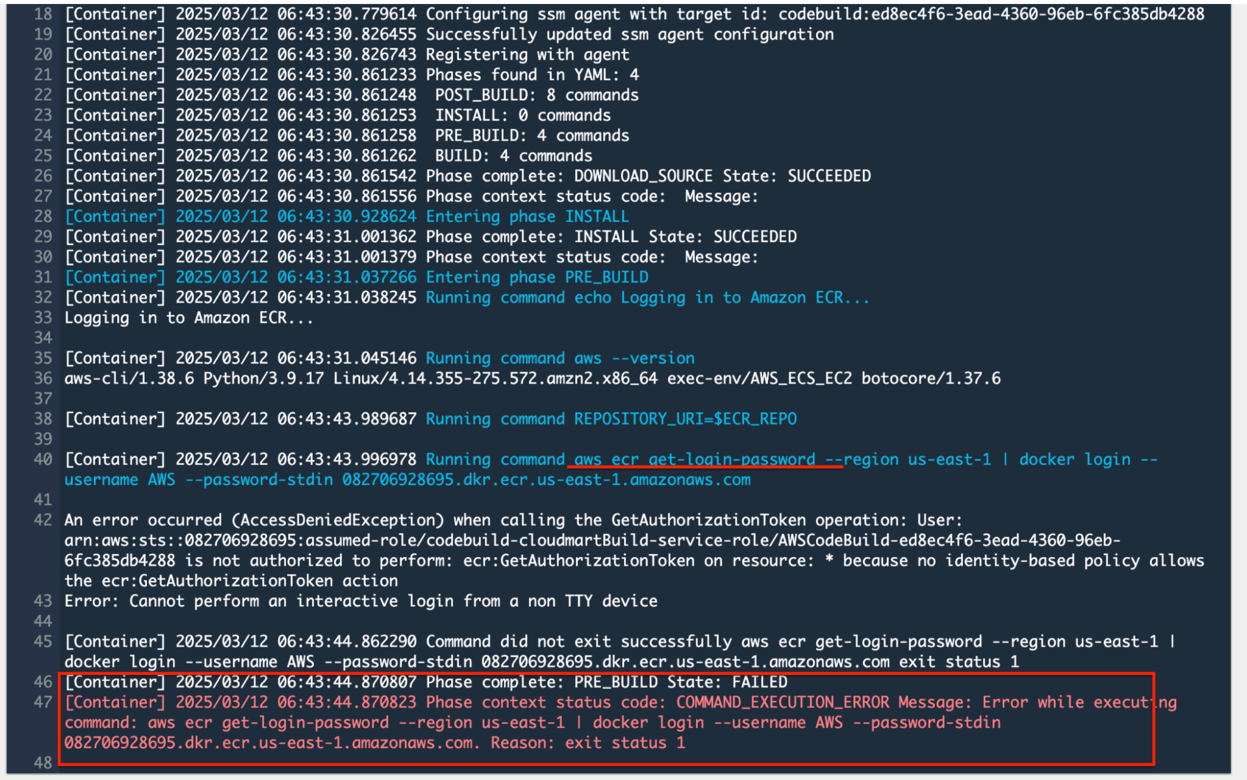
Pipeline | Executions | Settings | Tags | Stage

✓ Source
b16a2bcc-4253-4274-895f-9aef83f8ea42
All actions succeeded.
Source
✓ GitHub (via OAuth app)
Mar 11, 2025 11:29 PM (UTC-7:00)
7762a8f7 Source: app sent t ...

⊗ Build ⚠
b16a2bcc-4253-4274-895f-9aef83f8ea42
1 of 1 action failed.
Build
⊗ AWS CodeBuild
Mar 11, 2025 11:30 PM (UTC-7:00)
7762a8f7 Source: app sent t ...

Add the **“AmazonElasticContainerRegistryPublicFullAccess”** permission to ECR in the service role

Everything seems to be fine but i have another issue, it seems like i made a mistake when creating the front end repository, i created it private instead of public. Thats why its not allowed to connect



```
[Container] 2025/03/12 06:43:30.779614 Configuring ssm agent with target id: codebuild:ed8ec4f6-3ead-4360-96eb-6fc385db4288
[Container] 2025/03/12 06:43:30.826455 Successfully updated ssm agent configuration
[Container] 2025/03/12 06:43:30.826743 Registering with agent
[Container] 2025/03/12 06:43:30.861233 Phases found in YAML: 4
[Container] 2025/03/12 06:43:30.861248  POST_BUILD: 8 commands
[Container] 2025/03/12 06:43:30.861253  INSTALL: 0 commands
[Container] 2025/03/12 06:43:30.861258  PRE_BUILD: 4 commands
[Container] 2025/03/12 06:43:30.861262  BUILD: 4 commands
[Container] 2025/03/12 06:43:30.861542 Phase complete: DOWNLOAD_SOURCE State: SUCCEEDED
[Container] 2025/03/12 06:43:30.861556 Phase context status code:  Message:
[Container] 2025/03/12 06:43:30.928624 Entering phase INSTALL
[Container] 2025/03/12 06:43:31.001362 Phase complete: INSTALL State: SUCCEEDED
[Container] 2025/03/12 06:43:31.001379 Phase context status code:  Message:
[Container] 2025/03/12 06:43:31.037266 Entering phase PRE_BUILD
[Container] 2025/03/12 06:43:31.038245 Running command echo Logging in to Amazon ECR...
Logging in to Amazon ECR...

[Container] 2025/03/12 06:43:31.045146 Running command aws --version
aws-cli/1.38.6 Python/3.9.17 Linux/4.14.355-275.572.amzn2.x86_64 exec-env/AWS_ECS_EC2 botocore/1.37.6

[Container] 2025/03/12 06:43:43.989687 Running command REPOSITORY_URI=$ECR_REPO

[Container] 2025/03/12 06:43:43.996978 Running command aws ecr get-login-password --region us-east-1 | docker login --username AWS --password-stdin 082706928695.dkr.ecr.us-east-1.amazonaws.com

An error occurred (AccessDeniedException) when calling the GetAuthorizationToken operation: User: arn:aws:sts::082706928695:assumed-role/codebuild-cloudmartBuild-service-role/AWSCodeBuild-ed8ec4f6-3ead-4360-96eb-6fc385db4288 is not authorized to perform: ecr:GetAuthorizationToken on resource: * because no identity-based policy allows the ecr:GetAuthorizationToken action
Error: Cannot perform an interactive login from a non TTY device

[Container] 2025/03/12 06:43:44.862290 Command did not exit successfully aws ecr get-login-password --region us-east-1 | docker login --username AWS --password-stdin 082706928695.dkr.ecr.us-east-1.amazonaws.com exit status 1
[Container] 2025/03/12 06:43:44.870807 Phase complete: PRE_BUILD State: FAILED
[Container] 2025/03/12 06:43:44.870823 Phase context status code: COMMAND_EXECUTION_ERROR Message: Error while executing command: aws ecr get-login-password --region us-east-1 | docker login --username AWS --password-stdin 082706928695.dkr.ecr.us-east-1.amazonaws.com. Reason: exit status 1

```