Project: Hosting Customer Success Platform using AWS, Terraform and Github Actions.

Objective: The customer success platform automates project data sharing, auditing, and reporting, replacing manual processes with effortless automation for better monitoring, transparency, and stakeholder engagement.

Framework used is NextJS for this application.

Resources used:

1. Terraform for infrastructure as code.
2. CI/CD is created using Github actions.

AWS as Infrastructure provider.

Steps to create infrastructure using terraform:

1. Clone the infrastructure code from the https://github.com/Jainil115/cleo-infra
2. Then to setup infrastructure go to each folder (dev, staging, prod) and perform the following commands:
   ```
   terraform init
   ```

```
> terraform init

Initializing the backend...
Initializing modules...

Initializing provider plugins...
- Reusing previous version of hashicorp/aws from the dependency lock file
- Using previously-installed hashicorp/aws v5.40.0

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
```
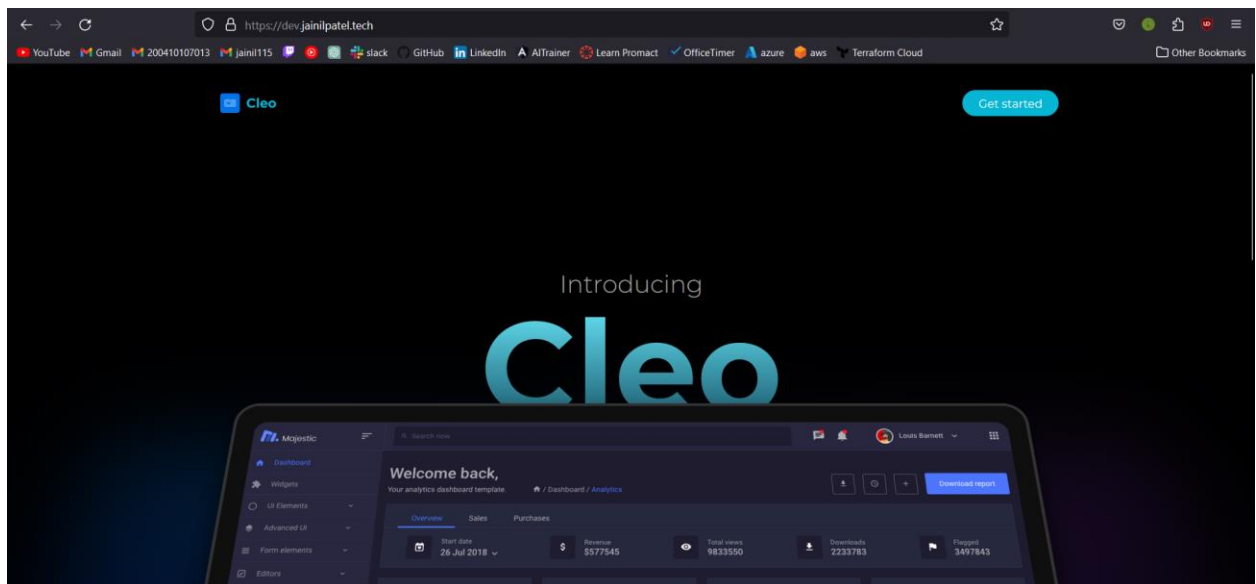
```
terraform apply
```

```
module.ecs.aws_ecs_service.this: Still creating... [2m30s elapsed]
module.lb.aws_lb.this: Still creating... [2m40s elapsed]
module.ecs.aws_ecs_service.this: Still creating... [2m40s elapsed]
module.lb.aws_lb.this: Still creating... [2m50s elapsed]
module.ecs.aws_ecs_service.this: Still creating... [2m50s elapsed]
module.lb.aws_lb.this: Still creating... [3m0s elapsed]
module.ecs.aws_ecs_service.this: Still creating... [3m0s elapsed]
module.lb.aws_lb.this: Still creating... [3m10s elapsed]
module.ecs.aws_ecs_service.this: Still creating... [3m10s elapsed]
module.lb.aws_lb.this: Creation complete after 3m14s [id=arn:aws:elasticloadbalancing:ap-south-1:171358186705:loadbalancer/app/dev-asg-lb/a8a4ee7df8439dc1]
module.ecs.aws_ecs_service.this: Still creating... [3m20s elapsed]
module.hosted_zone.aws_route53_record.this: Creating...
module.lb.aws_lb_listener.this: Creating...
module.lb.aws_lb_listener.redirect: Creating...
module.ecs.aws_ecs_service.this: Still creating... [3m30s elapsed]
module.lb.aws_lb_listener.redirect: Still creating... [10s elapsed]
module.lb.aws_lb_listener.this: Still creating... [10s elapsed]
module.hosted_zone.aws_route53_record.this: Still creating... [10s elapsed]
module.ecs.aws_ecs_service.this: Still creating... [3m40s elapsed]
module.lb.aws_lb_listener.redirect: Creation complete after 12s [id=arn:aws:elasticloadbalancing:ap-south-1:171358186705:listener/app/dev-asg-lb/a8a4ee7df84
39dc1/a76c77cf4127f781]
module.lb.aws_lb_listener.this: Creation complete after 12s [id=arn:aws:elasticloadbalancing:ap-south-1:171358186705:listener/app/dev-asg-lb/a8a4ee7df8439dc
1/cd8090903fbd552f]
module.ecs.aws_ecs_service.this: Creation complete after 3m41s [id=arn:aws:ecs:ap-south-1:171358186705:service/dev-ecs-cluster/dev-ecs-service]
module.hosted_zone.aws_route53_record.this: Still creating... [20s elapsed]
module.hosted_zone.aws_route53_record.this: Still creating... [30s elapsed]
module.hosted_zone.aws_route53_record.this: Still creating... [40s elapsed]
module.hosted_zone.aws_route53_record.this: Still creating... [50s elapsed]
module.hosted_zone.aws_route53_record.this: Still creating... [1m0s elapsed]
module.hosted_zone.aws_route53_record.this: Creation complete after 1m9s [id=Z0549466DASBU2WLXHRU_dev.jainilpatel.tech_A]
Releasing state lock. This may take a few moments...

Apply complete! Resources: 28 added, 0 changed, 0 destroyed.
```

3. Then you will be able to the see the website working on the dev.jainilpatel.tech in this case:

GitHub actions:

1. Github repo link is https://github.com/Jainil115/cleo-devops
2. Make changes in a branch and commit it for CI/CD workflow to run.

3. Now the change made are being reflected on the website:

Development Work underway Edited by Jainil Again !!! Development Final, By Vivek Kadam!!