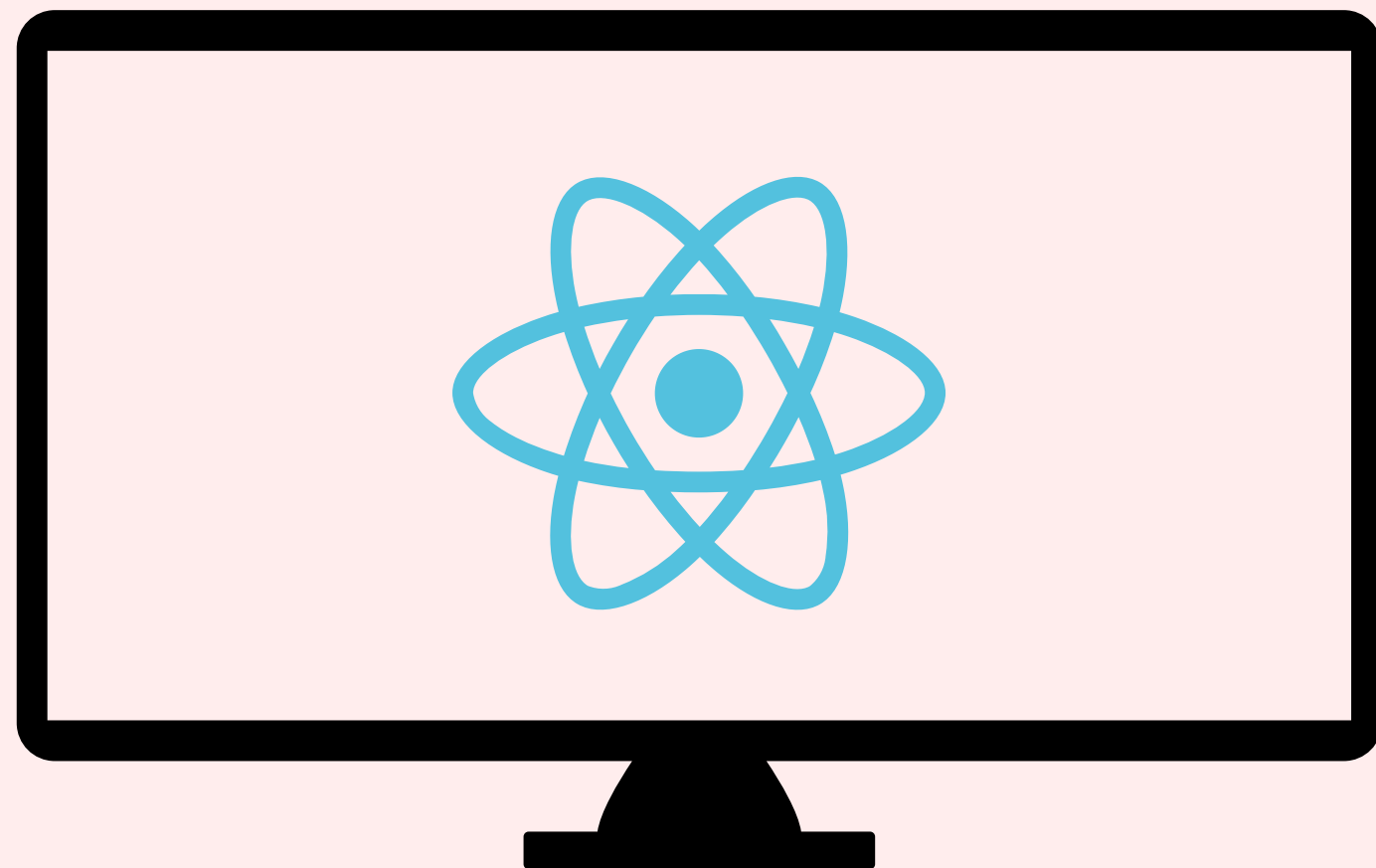
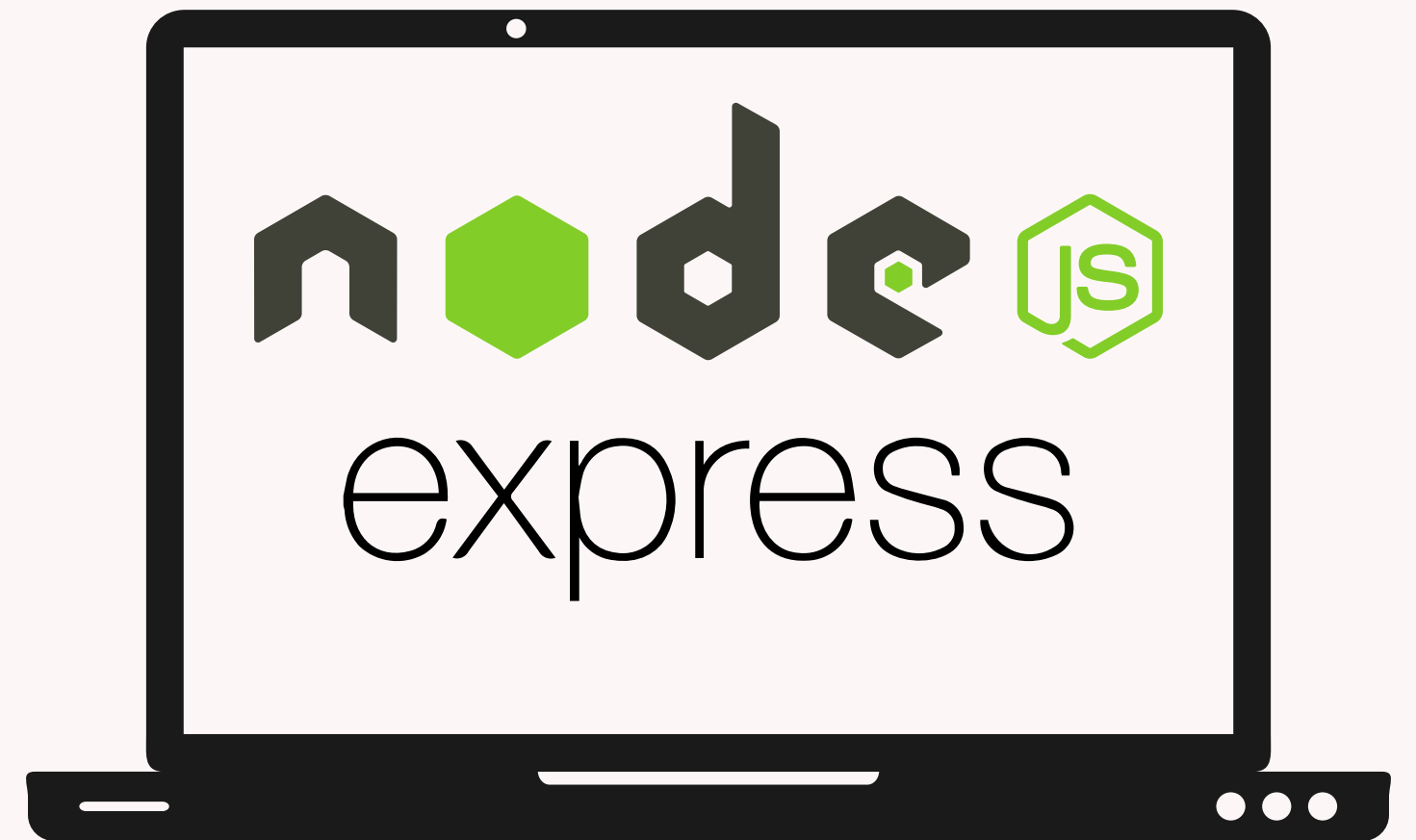


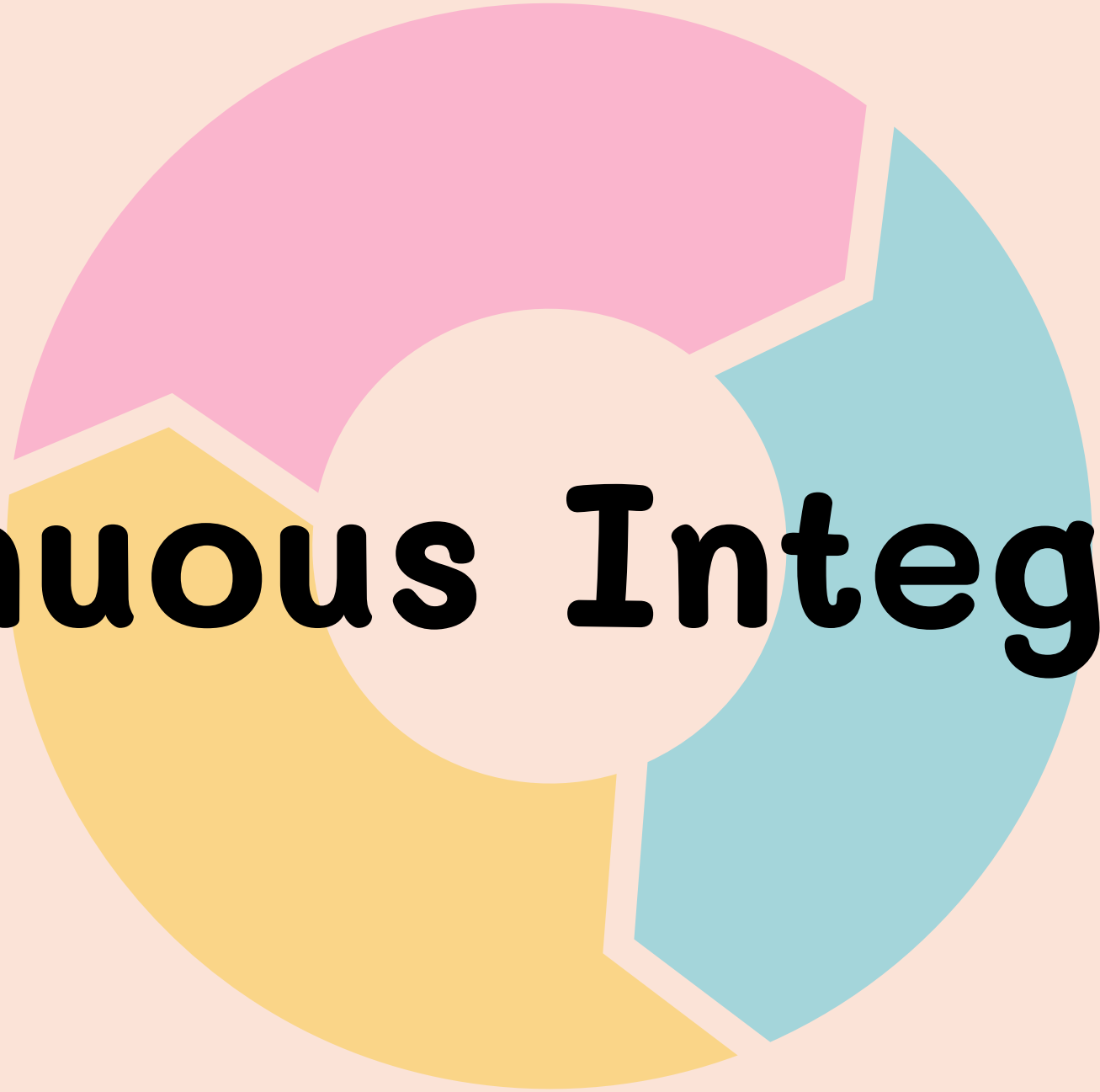
# INSTAGRAM CLONE

# Frontend



# Backend





# Continuous Integration



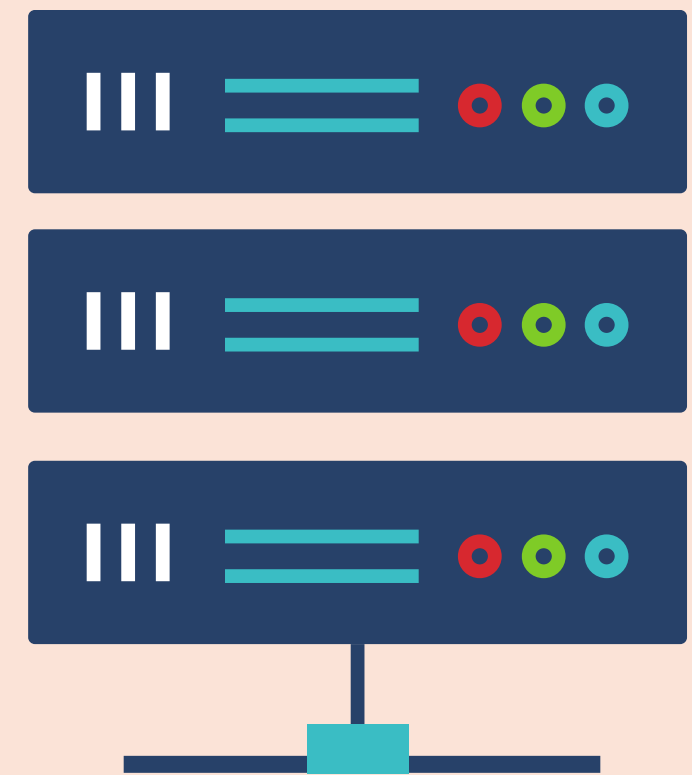
**Build**

**Test**


**Merge**



# Backend




# Build



```
- name: Set ENV file
  working-directory: ./Backend
  run: echo ${ secrets.ENV_PORT } >> .env
      | echo ${ secrets.ENV_DB_USERNAME } >> .env
      | echo ${ secrets.ENV_DB_PASSWORD } >> .env
      | echo ${ secrets.ENV_DB_NAME } >> .env
      | echo ${ secrets.ENV_TOKEN_KEY } >> .env
```

Set ENV File สำหรับเชื่อมการทำงานกับ Database


# Build & Run



```
- name: Install node modules for backend and start server
  working-directory: ./Backend
  run: |
    ls
    npm install
    npm start &
```

ติดตั้ง node modules และทำการเปิดทำงาน Server

# Test



```
- name: Run test backend  
  working-directory: ./Backend  
  run: npm test
```

ทำการรันคำสั่ง `npm test` เพื่อทดสอบระบบ Back-end ตาม Test case ต่างๆ ที่เขียนไว้ไว้ใน Directory "Back-end "



# Test Complete

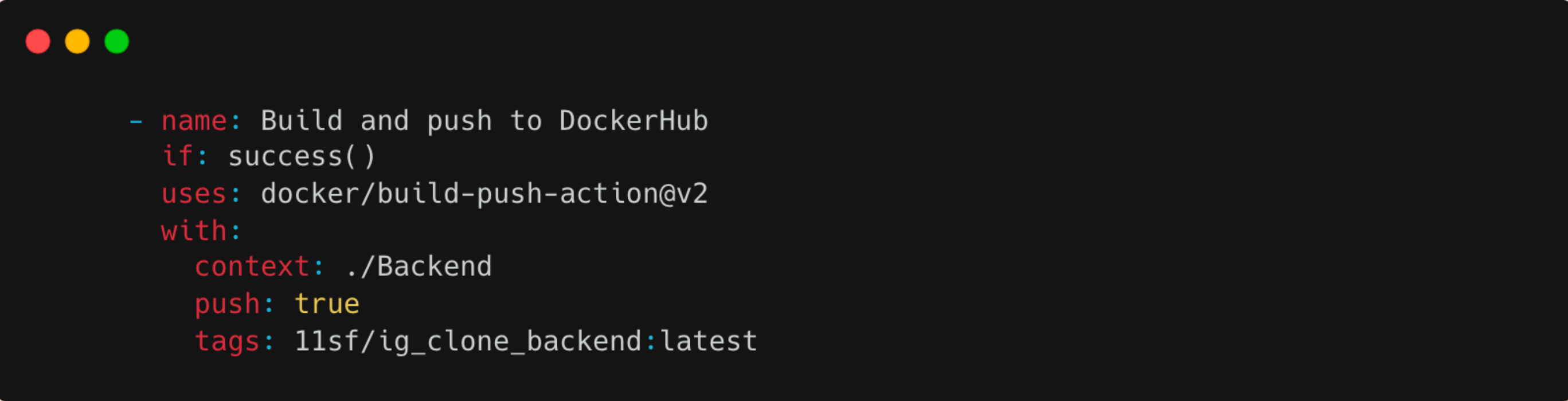
```
- Event: push
- Repo: 11SF/ig-clone
- Ref: refs/heads/dev
- Workflow: Ig Clone Project CI/CD Pipeline
- Author: 11SF
- Committer: 11SF
- Pusher: 11SF
- Commit URL: https://github.com/11SF/ig-clone/commit/a79c05f6d1fc9753bbdec86dab7646c3cbace308
- Commit Message: 5
```

(Backend) Test Succeeded!

Severity: Informational • 08/12/2021

**Notify to team chat**

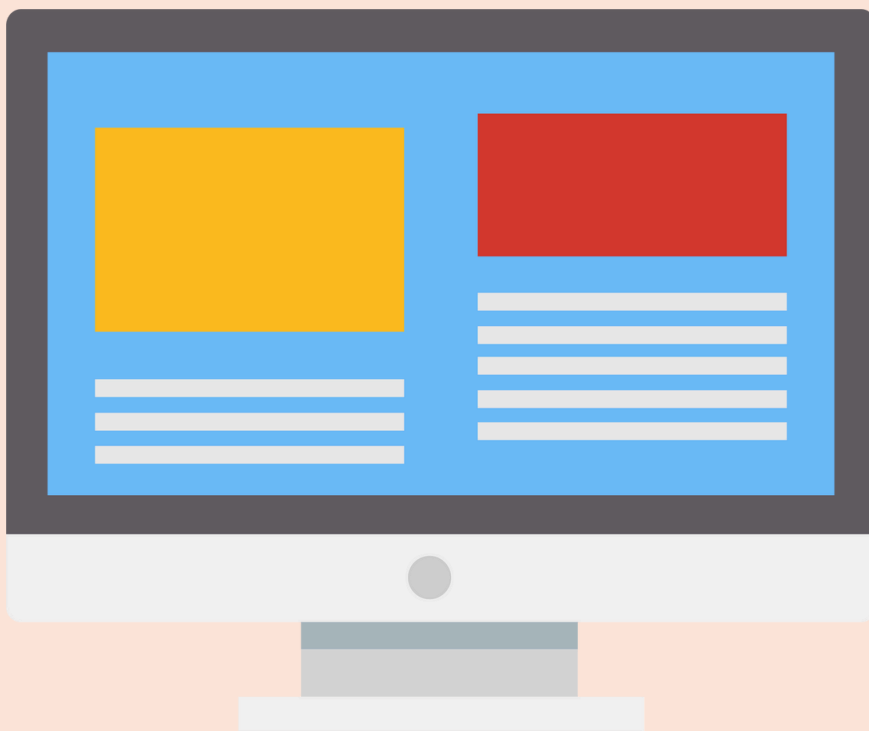
# Push to Docker Hub




```
- name: Build and push to DockerHub
  if: success()
  uses: docker/build-push-action@v2
  with:
    context: ./Backend
    push: true
    tags: 11sf/ig_clone_backend:latest
```



# Frontend




# Build



```
- name: Install node modules for frontend  
  working-directory: ./Frontend  
  run: |  
    npm install
```

ติดตั้ง node modules

# Test



```
- name: Run test frontend  
  working-directory: ./Frontend  
  run: npm test
```

ทำการรันคำสั่ง `npm test` เพื่อทดสอบการทำงานของ Front-end ตาม Test case ต่างๆ

# Test Complete


```
- Event: push  
- Repo: 11SF/ig-clone  
- Ref: refs/heads/dev  
- Workflow: Ig Clone Project CICD Pipeline  
- Author: 11SF  
- Committer: 11SF  
- Pusher: 11SF  
- Commit URL: https://github.com/11SF/ig-clone/commit/a79c05f6d1fc9753bbdec86dab7646c3cbace308  
- Commit Message: 5
```

(Frontend) Test Succeeded!

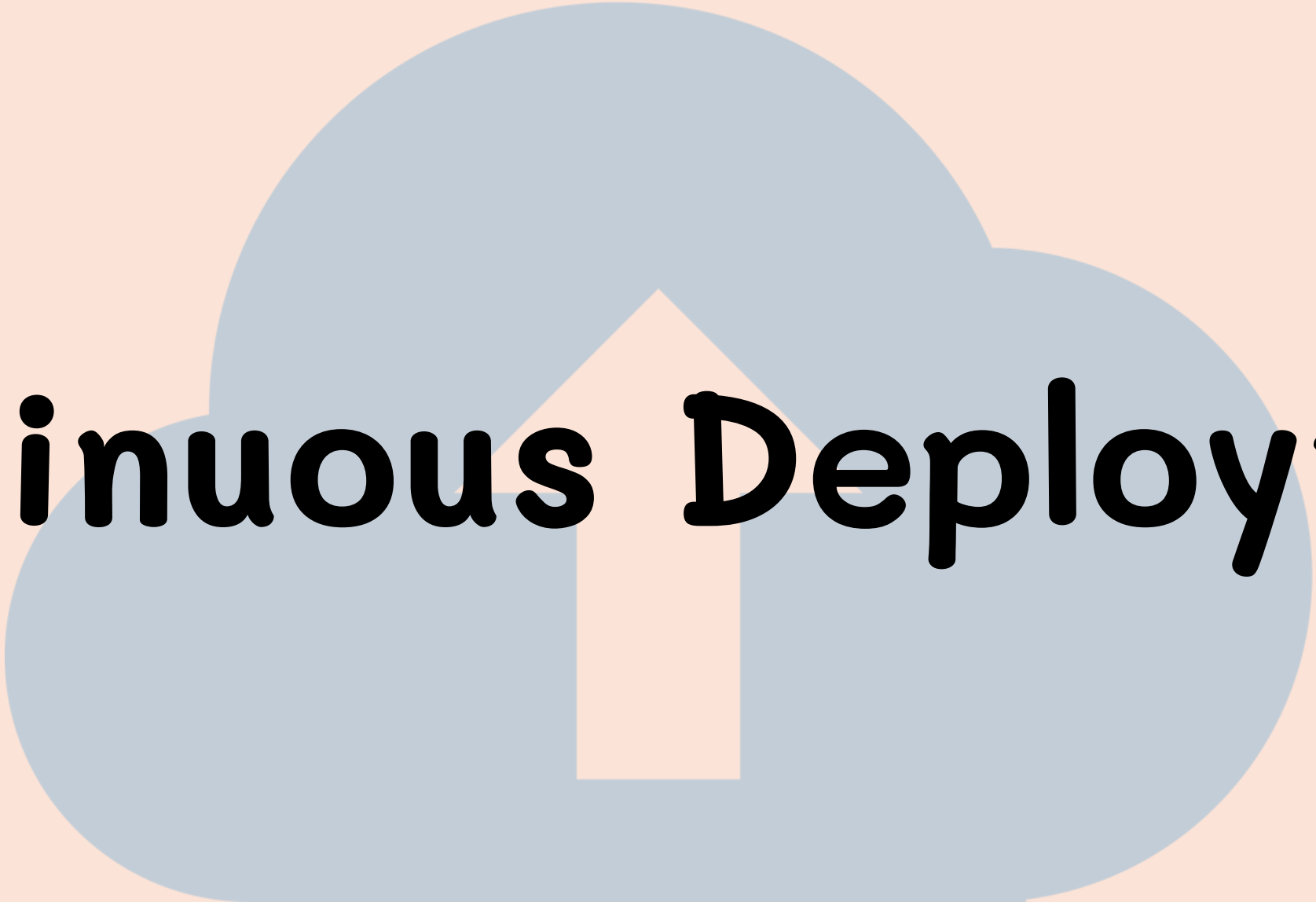
Severity: Informational • 08/12/2021

**Notify to team chat**

# Push to Docker Hub



```
- name: Build and push to DockerHub
  if: success()
  uses: docker/build-push-action@v2
  with:
    context: ./Frontend
    push: true
    tags: 11sf/ig_clone_frontend:latest
```



# Continuous Deployment

*ถ้ากระบวนการทำ CI ไม่ผ่าน จะไม่ทำในส่วนนี้*





**Deploy to AWS EC2**



# Create New EC2

```
aws ec2 run-instances  
--image-id ami-04902260ca3d33422  
--instance-type t2.micro  
--key-name $KEY_PAIR_NAME  
--security-group-ids $SECGROUP_ID  
--user-data file://user_data_script.txt
```

# user\_data\_script.txt



```
#!/bin/bash
sudo yum -y update

sudo amazon-linux-extras install docker -y
sudo service docker start

sudo gpasswd -a ec2-user docker
newgrp docker

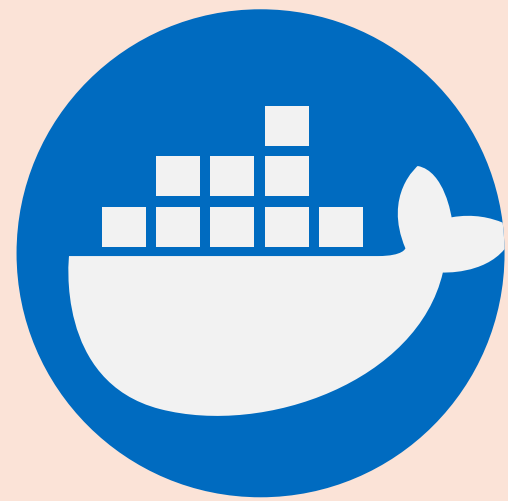
docker run -t -d -p 80:3000 11sf/ig_clone_frontend
docker run -t -d -p 3001:3001 11sf/ig_clone_backend
```

# Notify to Team chat

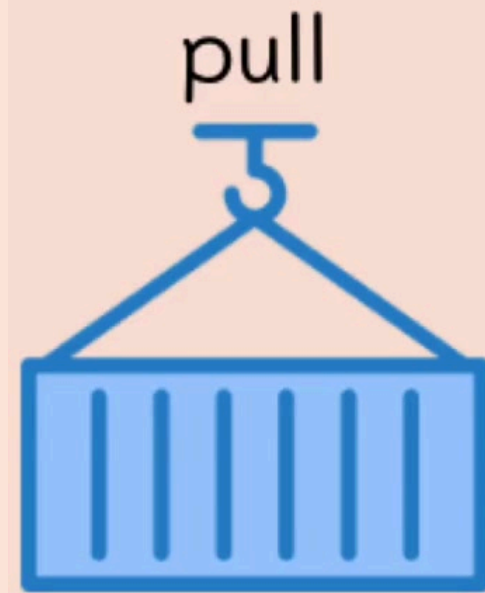
- **Event:** push
- **Repo:** 11SF/ig-clone
- **Ref:** refs/heads/dev
- **Workflow:** Ig Clone Project CICD Pipeline
- **Author:** 11SF
- **Committer:** 11SF
- **Pusher:** 11SF
- **Commit URL:** <https://github.com/11SF/ig-clone/commit/a79c05f6d1fc9753bbdec86dab7646c3cbace308>
- **Commit Message:** 5

Deploy to AWS Success!!

Severity: Informational ▪ 08/12/2021



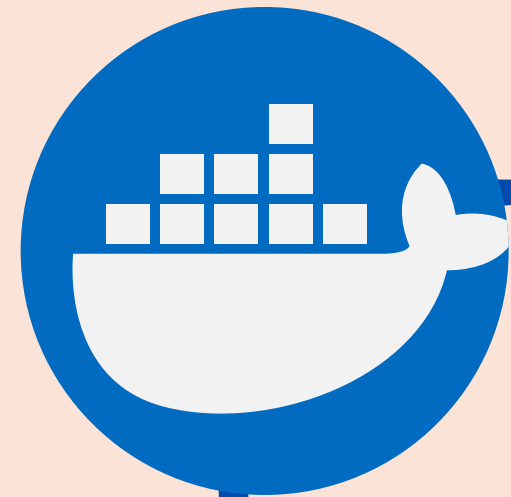
**Docker Hub**



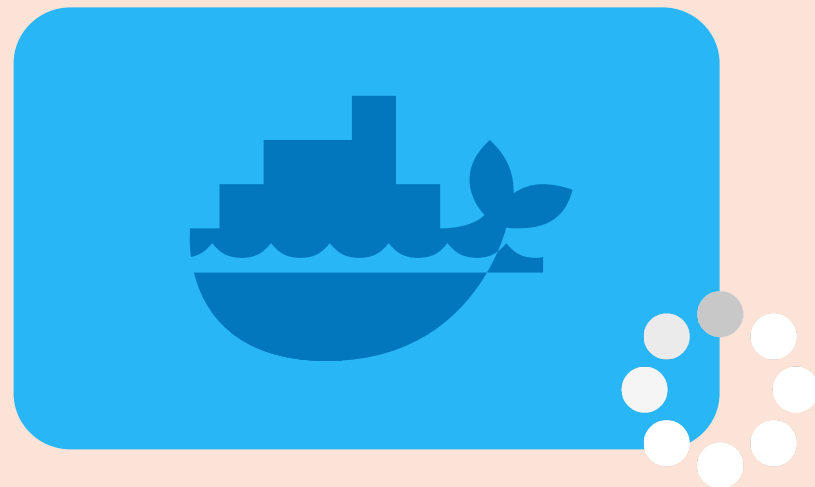
ig\_clone\_frontend  
ig\_clone\_backend



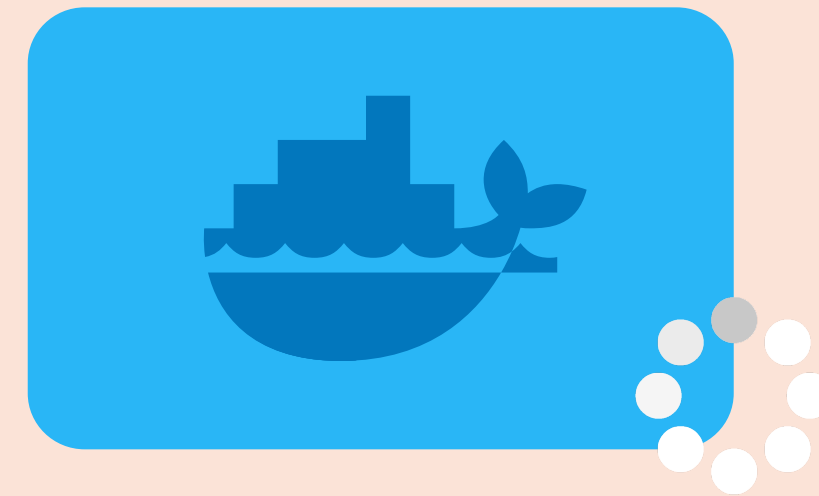
**AWS EC2**



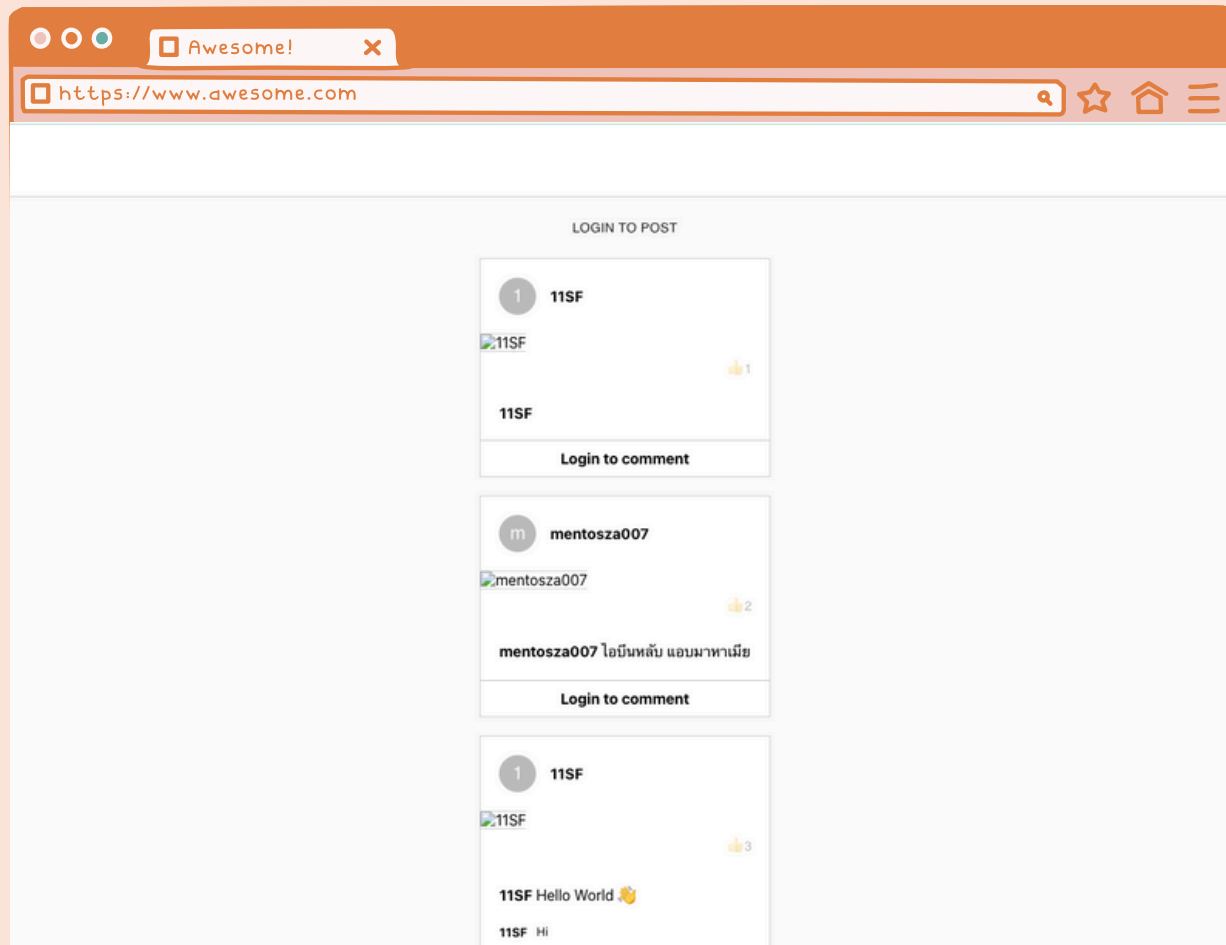
# Docker



run ig-clone-frontend on port 80:3000

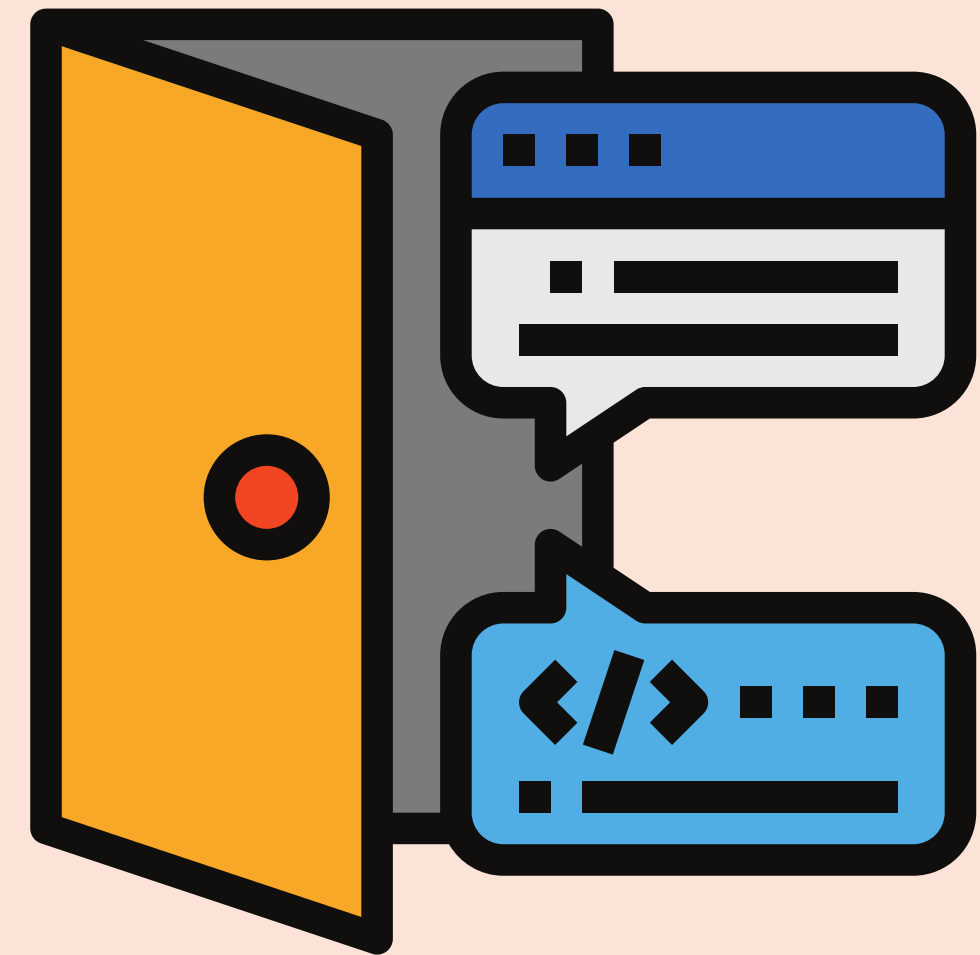
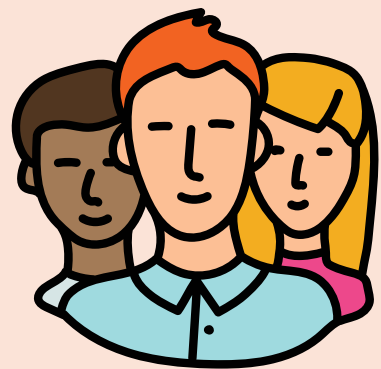


run ig-clone-backend on port 3001:3001



## Frontend of ig-clone

running on port 80



## Backend of ig-clone

running on port 3001

**เวลาที่ใช้ในการทำ Manual Deploy คือ 11 นาที 30 วินาที**

**เวลาที่ใช้ในการทำ CI/CD คือ 6 - 8 นาที**