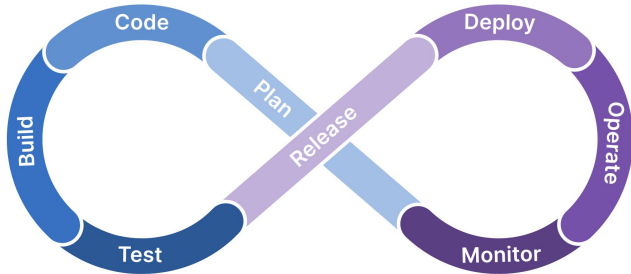Benefits of using CI/CD to Achieve, Build, and Deploy Automation
for Cloud-Based Software Products

- Decreased time to ship new features to production
  leading to more satisfied clients, reduced costs, and increased revenue
- Increased uptime due to rigorous automated testing
  and automated deployment process with rollback if smoke test fails
  leading to higher users satisfaction, and protecting the revenue
- Increased security due to automated security scanning
  avoiding unexpected consequences and costs

CICD pipeline for this project

Push

Build

Unit Test

Analyze

Destroy Old Stack

Switch to New (modify distro origin)

Success Message in Slack

Failure Alert in Slack

Pass?

No

Pass?

Is Master?

Yes

Yes

Smoke Test

Yes

Rollback (Destroy new stack, revert migraiton)

No

No

Pass?

No

Create Infrastructure (CF)

Save API_URL to env

Pass?

Yes

Configure Infra (Ansible)

Pass?

Yes

Migrate Database

Prepare (Re-build FE with API_URL env var) and Deploy (Copy Files)

No

Legend:
CI: Purple
CD: Yellow
Rollbacks: Red