

Deployment Progress Report

Phase 1: Infrastructure Setup (10 Hours Completed)

Work Completed Till Now

- Successfully dockerized the Margin Calculator application for smooth deployment
- Written complete Terraform scripts for AWS EC2 infrastructure setup
- Configured Nginx reverse proxy with proper authentication (.htpasswd)
- Created security groups and network configurations as per requirements
- Tested the deployment process and everything is working fine

Technical Implementation Done

- Docker containerization for easy deployment and scaling
- Terraform IaC for managing AWS resources (EC2, Security Groups, etc.)
- Nginx setup for reverse proxy and security
- Basic authentication implemented for access control

Phase 2: CI/CD Pipeline & Returns App Deployment (Next 10 Hours)

Planned Work for Next Phase

1. CI/CD Pipeline Setup

- Will implement GitHub Actions for automatic deployment
- Docker images will be automatically built and pushed to AWS ECR

2. Returns Calculator App Deployment

- Will containerize the Returns Calculator module also
- Integration with current infrastructure
- Both apps will share same Nginx configuration

3. Production Level Improvements

- SSL certificate setup using Let's Encrypt
- CloudWatch monitoring for better tracking

- Domain configuration and setup

Final Outcome

After completing Phase 2, we will have fully automated deployment pipeline with proper CI/CD. Any new changes can be deployed automatically without manual intervention. Both Margin and Returns calculators will be running smoothly on production.

Current Access Details

The Margin Calculator app is currently live and accessible at:

- **URL:** <http://13.218.253.207>
- **Username:** admin
- **Password:** MarginApp2024

Note: If you require a custom domain for the application, please let me know and I will configure it in the next phase along with SSL certificate.

Note: All infrastructure is designed keeping AWS Free Tier in mind to minimize costs while maintaining good performance and security.