

DevOps Scope – Initial Setup

About Nexus: Nexus is a fast-growing, bootstrapped digital wallet and benefits platform that empowers organizations and communities to deliver real economic value to their members. We currently serve nonprofit organizations, alumni communities, small businesses, and municipalities through a branded platform offering cashback, digital payments, exclusive deals, and community engagement tools.

Objective:

Deliver a minimal but production-ready cloud infrastructure setup to support Nexus' Phase 1 React frontend deployment on Azure Kubernetes Service (AKS), using GitOps and best practices for security and scalability.

Work Breakdown:

1. AKS Cluster Setup + Namespace Configuration

~1.0 hour

- Provision AKS with default node pools
- Create environment-based namespaces (e.g., dev, prod)
- Set up NGINX Ingress Controller for traffic routing

2. Container Registry Integration + CI Pipeline

~1.0 hour

- Connect to Azure Container Registry or Docker Hub
- Build and push container images via GitHub Actions or Azure DevOps

3. ArgoCD Deployment and GitOps Bootstrapping

~1.0 hour

- Install and configure ArgoCD
- Bootstrap GitOps pipeline from a private Git repo
- Sync React frontend deployment via Git

4. Frontend Network Exposure (IP-restricted)

~0.5 hour

- Expose frontend via Ingress with strict IP restrictions
- Define basic NetworkPolicy rules

5. Azure Key Vault Secret Management

~0.5 hour

- Integrate AKS with Azure Key Vault
- Mount secrets using CSI driver

6. Monitoring Stack Initialization (Prometheus + Grafana)

~1.0 hour

- Deploy Prometheus & Grafana using Helm
- Configure secure dashboard access (basic setup only)

Deliverables

- AKS cluster and namespace structure

- CI pipeline for building/pushing frontend containers
- GitOps setup via ArgoCD
- Secure public access to frontend only
- Azure Key Vault integration
- Initial monitoring stack (Prometheus + Grafana)