**📝 Project Title**

*E.g., "Azure Kubernetes Services (AKS) with CI/CD Pipeline"*

**🔹 1. Objective / Overview**

Explain the purpose of the project:

Deploy containerized applications on Azure AKS with automated CI/CD pipeline for scalable and resilient workloads.

**🔹 2. Business Problem / Requirement**

Why this project was needed:

The client required a high-availability architecture with automated deployment, cost-optimization, and centralized logging.

**🔹 3. Solution Architecture**

Describe and show the architecture:

* AKS Cluster
* Azure DevOps Pipeline
* Azure Container Registry
* Application Gateway
* Log Analytics

Include a diagram (hand-drawn, Lucidchart, or draw.io).

**🔹 4. Tools & Technologies Used**

List of what you used:

* Azure AKS, Azure DevOps
* Terraform / Bicep
* Helm Charts / YAML
* Azure Monitor, Log Analytics
* GitHub / GitHub Actions

**🔹 5. Implementation Steps**

Write high-level steps or attach code snippets:

1. Infrastructure provisioned using Terraform
2. Containerized app deployed to ACR
3. CI/CD pipeline built in Azure DevOps
4. Deployed to AKS with Helm
5. Setup monitoring and alerts

**🔹 6. Challenges and Mitigation**

Explain what went wrong or was difficult:

* ❌ Problem: Deployment stuck in Pending state
* ✅ Solution: Adjusted AKS node pool and assigned static IP

**🔹 7. Outcome / Results**

Mention the results:

* ✅ Deployment time reduced from 3 hours to 30 mins
* ✅ 99.9% uptime achieved
* ✅ Monitoring and alerting automated

**🔹 8. Screenshots / Diagrams**

Add:

* Azure portal screenshots
* Pipeline YAML
* Architecture diagram

**🔹 9. References / Links**

Include links to:

* GitHub repo
* Live project (if public)
* Docs used