CI/CD Pipeline Documentation

Overview:

This document outlines a simulated CI/CD pipeline for the Online Food Ordering System, ensuring automated building, testing, and deployment of the application.

Stages:

- Source Control: Code is managed in the GitHub repository (e.g., https://github.com/humayunkhan609/onlinefoodorderingsystem).
- Build: Code is compiled and packaged (simulated using GitHub Actions).
- Testing: Automated unit tests are run (simulated).
- Containerization (Docker): The app is packaged into a Docker container (simulated).
- Deployment (Staging): The container is deployed to a staging environment (simulated using Kubernetes).
- Deployment (Production): After staging validation, the container is deployed to production (simulated using Kubernetes).
- Monitoring (Prometheus/Grafana): System metrics (e.g., uptime) are monitored (simulated).

Tools Used:

- GitHub Actions: For build automation and CI workflows.
- Docker: For containerization.
- Kubernetes: For simulated deployment orchestration.
- Ansible: For configuration management (simulated).
- Prometheus/Grafana: For monitoring (simulated).