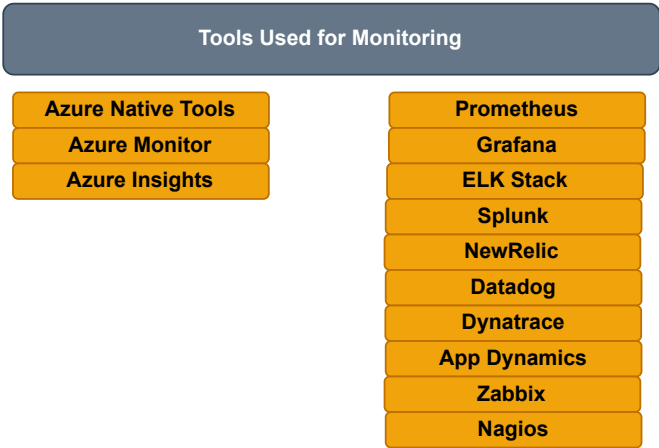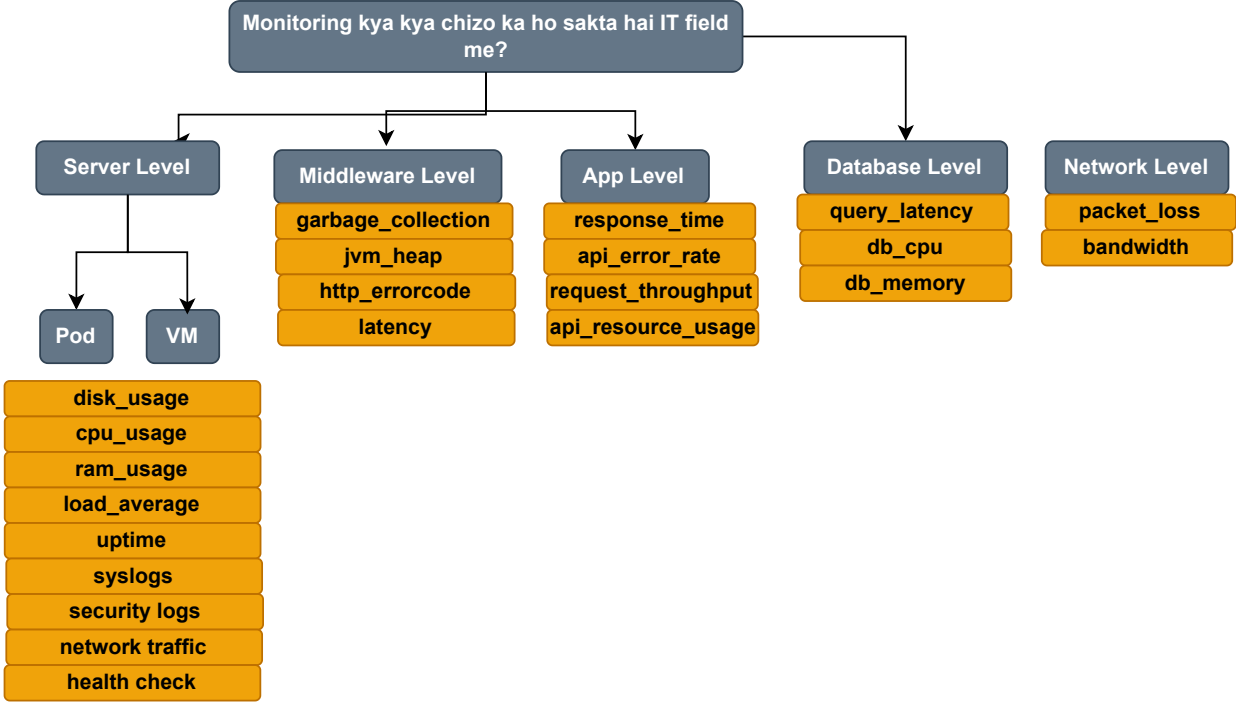1. Infra Set karna azure devops/github actions se

2. CI for all 4 microapps- multistage dockerfile ko build karke ACR me push karna hai

3. Kubernetes deployment.yaml, service.yaml, ingress.yaml.. likh kar.. argocd set karke... helm se deploy karna hai..

AKS me do namespace hoga, preprod and prod

Deadline for Infra Automation - 25th Nov 2025

DeadLine for App Deploy using Helm - 30 November 2025

Prod me jane se pehle, SAST, DAST, Threat Modeling, Pen Test, Qualys, Owasp ZAP, OpenVAS, BlackDuck

Monitoring is part of maintance, monitoring and security dono bhai bhai hai..

Monitoring kya kya chizo ka ho sakta hai IT field me?

Server Level

Middleware Level
- garbage_collection
- jvm_heap
- http_errorcode
- latency

App Level
- response_time
- api_error_rate
- request_throughput
- api_resource_usage

Database Level
- query_latency
- db_cpu
- db_memory

Network Level
- packet_loss
- bandwidth

Pod   **VM**

- disk_usage
- cpu_usage
- ram_usage
- load_average
- uptime
- syslogs
- security logs
- network traffic
- health check

Tools Used for Monitoring

Azure Native Tools
- Azure Monitor
- Azure Insights

- Prometheus
- Grafana
- ELK Stack
- Splunk
- NewRelic
- Datadog
- Dynatrace
- App Dynamics
- Zabbix
- Nagios

Monitoring Tool is a software, Koi bhi gadbad hua application level pr, server level pe, health me problem hua, vo tool continously check karta hai..

Monitoring Tool kaam kaise karta hai?

1 Data Collection
| Metrics | Logs |

Data Collection karne ke lie Agent dalna pdega..

Agent Based Monitoring Tool

Agentless Monitoring Tool

2 . Data Storage

Prometheus(tsdb), Influx DB, Elastic Search, Log Analytics Workspace

3. Data Analysis and Processing

4. Alerting - email, teams, sms, phone call, etc..

5. Dashboard, Visualization(Grafana, Kibana, Dynatrace, Datadog Dashboard, Azure Dashboard, Power BI)

Azure Monitor me KQL chlta hai...

Log + Traces + Metrics = Observability

| Metrics - Number jaisa | Log - text data | Traces = end to end flow |