

Core Assignment 5: Overview of Monitoring & Logging Tools

1. Provide a description, benefits, and use cases for each monitoring tool that we previously discussed.

Monitoring/logging tool	Description	Benefits <i>(give at least 3 each)</i>	Use Cases <i>(give at least 3 each)</i>
AWS CloudWatch	CloudWatch provides you with data and actionable insights to monitor your applications, respond to system-wide performance changes, and optimize resource utilization. CloudWatch collects monitoring and operational data in the form of logs, metrics, and events.	<ol style="list-style-type: none">1. Use a single platform for observability.2. Collect metrics on AWS and on premises3. Derive actionable insights from logs	<ul style="list-style-type: none">• Tracking all the incoming requests.• Filtering the requests.• It can collect and access all your performance and operational data in the form of logs and metrics from a single platform rather than monitoring them in a server, database, or network.
ELK Stack	"ELK" is the acronym for three open source projects: Elasticsearch, Logstash, and Kibana. Elasticsearch is a search and analytics engine. Logstash is a server-side data processing pipeline that ingests data from multiple sources simultaneously, transforms it, and then sends it to a "stash" like Elasticsearch. Kibana lets users visualize data with charts and graphs in Elasticsearch. The Elastic Stack is the next evolution of the ELK Stack.	<ol style="list-style-type: none">1. ELK is geared to handle big data to provide crucial business insights.2. ELK is simple to use, set up and is user friendly.3. As an open-source program, ELK is highly cost effective.	<ul style="list-style-type: none">• Log management• Security monitoring and alerting• E-commerce search solutions