Seminar No.2

Answer the following questions:

● What is the paper about?

Practices used by google to build monitoring and alerting systems

● What is monitoring?

Logging and controlling the data. Collect , process and display.

● Why monitor a system in the first place?

To identify problems or abnormalities and prevent before a total system failure

● Explain the 4 golden signals of monitoring.1) Latency - the time before anything happens, important for responsiveness

2) Traffic - The current demand on the system.

3) Errors - Monitoring errors is another significant part to be monitored because protocol response codes are insufficient to express all failure conditions.

4) Saturation - shows how full a service is. When it reaches 100% all further requests will be slower or not be processed at all

● According to the paper, how do you do the monitoring? What is important? Exemplify.

For good monitoring we must determine what is broken and why. This is a causal relation between the two

● What approach would you use for your lab: White-box or Black-box monitoring? Why?

For a high quality project, I believe white box would be a better approach, given that you have the code and can see clearly the internal state of the app, you don't have to use the black box method of monitoring. It allows detection faster than only observing the outer layers of the app

● What happened with Bigtable SRE and how did they "fix" the situation?

The service was based on a client’s mean performance. Because of bigtable and lower layers the mean performance had a problem. To fix it, the team made this: while making great efforts to improve the performance of Bigtable, we also temporarily dialed back our SLO target, using the 75th percentile request latency. We also disabled email alerts, as there were so many that spending time diagnosing them was infeasible. This strategy gave us enough breathing room to actually fix the longer-term problems in Bigtable and the lower layers of the storage stack, rather than constantly fixing tactical problems.