

Two-weekly report

Miss. Singh, Priya

Matriculation Number: **1428461**

Group Number: **6**

NUM Project: **3**

Email: **priya.singh@stud.fra-uas.de**

Q. What have I accomplished since the last Daily Standup?

During the last 2 week, multiple software installations were successfully concluded, including Prometheus, Windows Node Exporter, and Grafana. The consequent monitoring of metrics on local host ports 9090 and 9182 was then implemented. A significant achievement was the creation and integration of interactive dashboards on Grafana, utilizing the Prometheus data source. These dashboards showcase valuable visual representations of time-series data, including CPU core utilization, memory utilization, paging memory availability, as well as detail on logical disk read/write operations and the time spent on each. Additionally, a Python script was established to access and download Prometheus data from the server in both JSON and CSV formats. This led to the development of a real-time monitoring system that continuously measures the metrics.

Q. What will I accomplish until the next Daily Standup?

Looking ahead to the next two weeks, the main focus will be on consolidating the data obtained through the wide variety of APIs provided by Prometheus. The goal is to store this data in a relational database, with an emphasis on maximizing its potential for analysis. Additionally, I'll put efforts into studying various Grafana plugins that can further assist with the automatic monitoring and downloading of data. Another critical task will be devising 'alert rules' that will effectively manage any potential metric value violations.

Q. Do I anticipate any obstacles and can the team help me with them?

Although the venture has been mostly successful, certain challenges were encountered. The most significant one being the consolidation of data from different queries provided by Prometheus into a single file. This stems from the challenges of capturing time series data systematically. However, thanks to the collective skills and experiences represented in our team, I received the needed support to navigate through these challenges effectively. I am grateful for their assistance and look forward to fostering this spirit of teamwork and problem-solving in the weeks ahead.