**prep week: BASH**

BASH basics

The following exercise contains the following subjects:

● BASH basics

**Instructions**

1. Scenario: Analyzing Server Logs

As an aspiring bash developer, you've been tasked with analyzing server logs for a website. You'll use various bash commands to navigate through logs, extract useful information, and generate reports.

1. Start by creating a directory named "ServerLogs".

2. Move into the "ServerLogs" directory.

3. Inside the directory, create three subdirectories: "AccessLogs," "ErrorLogs," and "Reports."

5. Move into the "AccessLogs" directory.

6. Create a sample access log file named "access.log". Fill it with the following data (see data file)

7. Display the first 10 lines of the access log.

8. Find all lines containing "GET" requests in the access log.

9. Count all the requests that have 192.168.1.104 in the access log. How many are there?

10. Create a script named "generate\_report.sh" that calculates the number of "POST" requests in the access log and saves the count to a file in the "Reports" directory.

11. Make the script executable.

12. Run the script on the access log and observe the generated report file.

13. Move into the "ErrorLogs" directory.

14. Create a file named "error\_summary.txt". Fill it with data from the error data file.

15. Locate all error log files in the "ErrorLogs" directory and its subdirectories that are connected to web (i.e. http or DNS).

16. Append the names of the error log files to "error\_summary.txt".

17. Calculate the total disk usage of the "ServerLogs".

2. send me the answers in pdf format to [yishain11@gmail.com](mailto:yishain11@gmail.com). Later in the course you will upload the answers to moodle.