MTAT.03.231 – Business Process Management

Homework 5 – Process Mining (5 points)

The goal of this assignment is to use Apromore in order to analyze an event log of a process for repairing devices.

The event log of the process is available here:
https://courses.cs.ut.ee/2020/bpm/spring/uploads/Main/repairExample.zip

Tasks.

1. What is the task in this process that takes the longest mean processing time and how long is this processing time? What is the transition with the highest waiting time and how long is this waiting time?
2. According to the SLA of this repair process, the repair should be completed in at most one hour. In what percentage of cases has this SLA been violated? Please explain the procedure that you followed in Apromore to find the answer and include in your answer a screenshot displaying the percentage of cases with SLA violations.
3. What is the mean cycle time of cases where the repair is restarted and what is the mean cycle time of cases where the repair is not restarted? Include in your answer the screenshots where these mean cycle times are displayed.
4. What is the mean cycle time of cases where a complex repair is performed versus those cases where it is not performed? Include in your answer the screenshots where these mean cycle times are displayed.
5. Enumerate at least four compelling differences between cases where the SLA has been fulfilled and cases where it has not been fulfilled? *Hint: maybe there is one type of activity, or path, or resource, that occurs more frequently in cases where there is a violation, or perhaps something or someone that takes more time in those cases where there is a violation, or perhaps different bottlenecks.*
6. Based on your findings, what recommendations would you make to the process owner to reduce the number of SLA violations?