

1. Challenge – Searchable Log-View

The picture below shows an example log view, containing three different types of log entries.

[2] is a logline of a background tool.

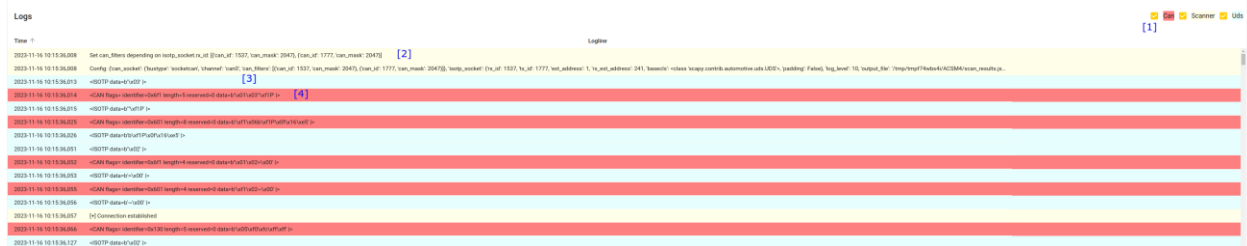
[3] is a network packet, ISOTP layer.

[4] is a network packet, CAN layer.

[1] allows to enable or disable specific log messages.

Challenge: Please implement a parser for network packet log lines, which allows a search for specific attributes in the log line. For example: `type==CAN && length > 5`. Please implement all “common” operators for network packet attributes.

Also design a search bar in this UI-element and explain how your design decision improves the user experience of this UI-element.



2. Challenge – Improvement of current filter handling of Enumerators

Our UI shows various network enumerators [1] and their results [2] in a dedicated UI-Element. This element has a search-bar [3]. Currently, only the compare operators “==”, “!=” exist. Please extend the functionality so that this filter bar supports greater, greater than, less and less than operators.

Bonus: Improve the User Experience of the search bar.



3. Challenge – Improve CSV Report generation

The picture below shows the “Generate CSV Report” button. This report is generated from the results of all enumerators of the selected “UDS Scan Run Report”. Improve the user experience of the report generation by providing a small “report generation widget”. This widget allows the user to select or filter elements of the current CSV report. Please note, that the current function contains a bug which creates one *.csv multiple times in the ZIP container.

