

Specification: Data reporting interface.

Background:

A chemical plant called Kemira are performing upgrades on their SCADA system, and would like to display data from the production in a user friendly way. The process type is batch, with the data being the recipe for each batch. The owner of the factory would like to have this data easily accessible for further usage. With not too many tags needed to be represented, a good solution would be to create a custom reporting interface for the factory's data.

User Interaction:

The user interface has a main page, this consists of a pane showing batch data. The main page shows a pane with daily report of the production, a pane with a search bar connected to it, and a third pane showing deviations in the daily recipe data. In the daily report pane batch data from the last 24 hours is presented in a table. In the empty search pane, the user is able to search for specific batches, dates, and variables. If the user searches for batches or dates, the empty pane is populated with a table displaying the corresponding information. If a variable is searched for, a graph showing its trend appears in the pane. The pane showing deviations, analyzes recipe data from the last 24h and shows the variables that have deviated from a normal. Each of the three panes should also have the option to export the data showing in the respective pane to excel-format.

Data Flow:

The data is retrieved from a SQL-server. And displayed as described in User Interaction. For the user, the only input would be the search bar. Otherwise the output is going to be the generated Excel-Files.