Implementation of a middleware to connect machine data from an external platform and simulation tools

Initial Situation

At the chair fml the digitalization of the construction site is also investigated in the field of construction logistics. A central point for increasing efficiency in construction projects is the application of process simulations before and during construction. Detailed modelling of individual construction processes can provide recommendations for action in real time, taking machine data into account.

Objective

In the context of the student research project, a data model is to be created with the currently available data and their technical boundary conditions. Based on this, a concept for a middleware between real-time machine data and simulation will be developed. This concept will be implemented afterwards. The necessary interfaces are already available. Further functions such as data storage and further processing are to be added. Optionally, an appropriate front-end is to be set up to control input variables of the simulation in a targeted manner.

Requirements

- Reliability and commitment
- Independent and structured way of working
- Open and communicative manner

Contact

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