Early-BIM

Description
The Early-BIM research group funded by DFG is dedicated to developing novel methods to demonstrate the enormous potential of model-based and simulation-based design planning as well as the possibilities of its technical implementation. The Early-BIM research group, is currently focusing on capturing, reuse and optimization of knowledge for the creation and evaluation of building design variants.

Possible Topics
- Graph representation and conversion of BIM models. The goal is to convert BIM models into graphs and store them inside Neo4j database.
- Identifying design potentials via searching in a graph database of reference projects. The goal is to design and test different cypher queries to search for various design potentials.
- Similarity determination in searching for reference projects. The goal is to test different sub-graph matching techniques.
- Visualization of design potentials and overall similarity of search hits. The goal is to intuitively and interactively visualize the information resulted from search queries and evaluation of design potentials.

Project Information:
Early-BIM
www.ar.tum.de/ai/forschung/building-information-modeling/earlybim/

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