

Revit-Plugin for a ruled-based splitting of elements

Setting:

Nowadays for designing and planning buildings, you often use building information models. Usually such a model represents the final and not intermediate construction states. For cycle planning and the selection of the optimal formwork you need to know the possible intermediate construction states gradually during the construction progress.

Your Tasks:

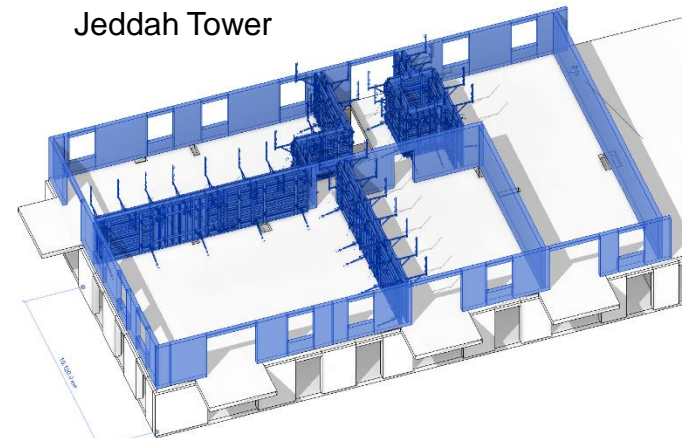
To find and define such possible intermediate states you need to split elements in a building information model. For the splitting you have to consider some rules for cycle planning like no joints inside openings and at corners of outside walls. Your task is to write a Revit-Plugin, which should split elements automatically as possible to define joints between casting segments. Later an aggregation of casting segments represents an intermediate construction state.

Project Characteristics

Modeling: ★★☆☆☆
Mathematics: ★★☆☆☆
Programming: ★★★★★
Science: ★★☆☆☆



Jeddah Tower



Cycle Planning (4 casting segments) 40