Automated Rule Checking in Construction

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Personal vision: Make data FAIR

*Findable, Accessible, Interoperable and Reusable*
Project background
The project material must be reviewed frequently to avoid accumulation of errors. This improves quality of the project.
Two tracks

Track A
creating results here and now
We make rules that can be used to review a building model in relation to the requirements of the Danish Building Regulations (BR18).

- A systematic review of BR18: which paragraphs can be automated?
- Conversion of BR18 requirements to 32 rule checks in the review program Solbat Model Checker.
- Testing rule checks on nine construction projects

Track B
exploring the potential of new technology
We explore how emerging technologies can be used for checking complex requirements to construction projects.

- Review of latest research on automatic rule checking, collected in a 40-page report
- Demo video showing how linked data technology can be used to review and compare information from different documents
- Interactive demo of a web service for reviewing construction project material

Role: Tech lead
Executive Summary

Automated Rule Checking (ARC)

En opsummering af den nyeste, internationale forskning inden for automatiske regeltjek i byggeværket.

Juni 2021

Delivery 1: Literature study

Report

Executive Summary
Delivery 2: Proof of Concept app

Learn more
Demo video
Delivery 3: BART Checker

Try it
Industry benefits

More time for professional and interdisciplinary review

Process for reviewing project material

Without BART

Collecting information, routine checks, bill of quantities, clash detection
Review
Interdisciplinary review
Reporting

With BART

Automatically collecting information, routine checks, and more
More time for
Review
More time for
Interdisciplinary review
Automatically Reporting
Thank you!