Body:

With the recent paradigm shift in architecture and construction from analog 2D plans and scale models to digital 3D building models, long-term preservation efforts must turn their attention to this new type of data. On the other hand, a wide range of related Web information sources have become available, providing information for instance about the history, location, context or environment of built structures. Currently, there exist no approaches able to provide a secure and efficient long-term preservation solution covering the broad spectrum of architectural knowledge, while at the same time taking into account the demands of institutional collectors like architecture libraries and archives as well as those of the private sector including building industry SMEs, owners and operators. The DuraArK project will tackle this challenge by developing long-term preservation tools that will be especially tailored to the domain of architectural 3D data. It will provide consistent and reliable metadata information about the content to ensure future-proof reusability of archived data. Additionally, it will for the first time cover and exploit the complete spectrum of representations used for architectural data, ranging from low-level 3D point clouds up to highly annotated BIM models and related semantics. Long-term OAIS compliant storage will be realized using future-proof open file standards that are already well-established in the architectural and construction community. The feasibility of the DuraArK approach will be evaluated in two use case scenarios involving an institutional collector as well as SME exploitation partners.

Logo:

Project abstract:

Preservation of architectural building data is crucial to suit the interests of all stakeholders (e.g. architects, engineers, building operators), for instance, to preserve cultural heritage and to enable knowledge-reuse of design and engineering solutions. The DuraArK project will tackle this challenge by developing long-term preservation tools, especially tailored to the domain of architectural knowledge, involving 3D models and point clouds as well as semantic metadata and related Web information.

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