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A generic process of documentation and data management for historical Malay architecture using bim (Article) (Open Access)

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Abstract

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Historical Malay Building Information Modelling (HMBIM) is a prototype library of historical Malay BIM objects, which are developed based on historical study on the architecture of Malay heritage. The objective of this paper is to outline a generic process of documentation and data management (data collection, modelling and retrieval using BIM), specific for the preservation and conservation effort of Malay architecture. This research employs multiple case studies technique and the process begins with the collection of data using multiple reliable sources namely archival reports, measured drawings and scan-to-BIM. HMBIM is enriched using reverse engineering approach where the information about building components are semantically identified according to Malay architecture characteristics and enriched into data coding system. Since there is no standard approach for conservators in the work of conservation, assembly and disassembly of Malay buildings in Malaysia, HMBIM is anticipated to be able to suggest 'standard' for the work. The main output for this paper is the creation of framework in demonstrating the processes involved.

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