Abstract

Internal positioning and navigation tools provide important information about semantic aspects of buildings, however information about indoor maps construction is not usually available and designing tools used for modeling indoor environments are hard to use or expensive. In this article, a Domain Specific Language (DSL) for modeling indoor environments is presented, allowing to create internal representation models, independent of platform. This work aims to create indoor map models for infrastructure of Indoor Navigation System (INavigS), where all the domain concepts present in the tool are used to specify models. The principles of the Model Driven Approach (MDA) are applied to define a metamodel language. In addition, a graphical interface is provided for modeling indoor environment models used by INavigS, allowing to model internal indoor environments quickly and easily, keeping the focus on concerns related to the domain of navigation infrastructure.

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Index Terms

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Keywords

Domain-Specific Language, Indoor representation model, Model-Driven Engineering, Modeling language, Indoor Navigation