An Automatic modelling tool for sport buildings visualization

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Accurate 3D models of sport buildings are required for several applications involving visualization and ticketing management processes. In addition to the hard modeling task, the resulting model must also be categorized by specified zones as well as correctly indexed for all seats and blocks in order to solve any visualization query.

In this work we present a geometric modeling and visualization tool for 3D automatic sport buildings generation. Our system procedurally generates the model from a set of 2D symbolic representations, providing a structured model that allows to obtain the building with different levels of element representations according to the user requirements. The system also provides a visualization platform that allows to navigate and inspect the resulted model through animation routes. Results show that our system is a powerful tool for fast creating and editing stadium models and may be feasible for being integrated as a helpful support for sport events organization.