ABSTRACT

An embodiment of the present invention provides a spatial-information generation apparatus that deletes, from spatial information, information unnecessary for processing for utilizing the spatial information and generating spatial information in which an information amount is reduced. A spatial-information generation apparatus according to an embodiment of the present invention includes a reference-plane acquirer, a simplification-section setter, and a shape simplifier. The reference-plane acquirer acquires, on the basis of a first spatial object related to a first space, first attribute information indicating attributes of the first spatial object, and first relation information indicating a relation between the first spatial object and objects of other constituent elements of the building, a reference plane object related to a plane of a part of the first space from the first spatial object and generates a shape of the reference plane object. The simplification-section setter sets a simplification section, which is a target to be simplified, in the shape of the reference plane object. The shape simplifier simplifies the shape of the reference plane object in the simplification section to thereby generate the reference plane object in the simplified shape.