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	Sequential fuzzy description logic: Reasoning for fuzzy knowledge bases with sequential information
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	Description logics are known to be a family of logic-based knowledge representation formalisms, and fuzzy description logics are expressive description logics for representing and handling fuzzy (vague or imprecise) knowledge bases. A sequential fuzzy description logic, which is introduced in this paper, is an extended fuzzy description logic where a sequence modal operator is introduced. In this paper, a translation from the proposed sequential fuzzy description logic to a standard fuzzy description logic is defined. Further, a theorem for embedding the sequential fuzzy description logic into the standard fuzzy description logic is proved using this translation. A theorem for relative decidability of the sequential fuzzy description logic with respect to the standard fuzzy description logic is established using the embedding theorem. The proposed logic and translation are intended for effective handling of fuzzy knowledge bases with sequential information (i.e., information expressed as sequences). Moreover, using the translation, existing methods and algorithms for the standard fuzzy description logic can be reused to effectively handle fuzzy knowledge bases with sequential information described by the sequential fuzzy description logic.