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Abstract

On our daily life, we need to engage with our neighbors on several issues ranging from social, security and general neighborhood wellbeing. In this regard, we have designed a “nyumba kumi” information system which uses artificial intelligence and the facts stored in its knowledge base to answer various “nyumba kumi” neighborhood queries. We collected a sample “nyumba kumi” concerns and converted them into facts and the system rules. Hence, we fed the system with sample facts converted into predicate logics, which we collected from a certain “nyumba kumi” neighborhood. The system is able to answer various neighborhood queries using artificial intelligence knowledge from the facts and rules fed into the system, which we designed using prolog. The system could be customized by adding as many facts and rules as possible as long as the facts and rules are not contradicting.

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Index Terms

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Keywords

Artificial intelligence, prolog, neighborhood information system, “nyumba kumi”