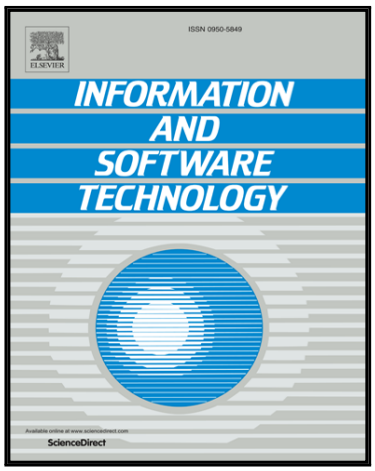

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Quality attributes and quality models for ambient assisted living software systems: A systematic mapping

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Abstract

Context: Ambient Assisted Living (AAL) has become an essential, multi-disciplinary research topic, aiming at providing software systems and services that assist people in their everyday life activities. Considering the critical nature of AAL systems, several initiatives have already contributed to the improvement of their quality, by mainly focusing on their non-functional requirements. Despite the importance of quality assurance in AAL systems, there is a lack of a comprehensive analysis on how quality assurance is performed in such systems. This fact might in turn lead to an absence of standardization with regard to the quality assurance process of these systems.

Objective: We provide a broad, detailed panorama about the state of the art on quality models (QMs) and quality attributes (QAs) that are important for the AAL domain.

Method: We performed a Systematic Mapping (SM). We used six publication databases to cover all published material pertinent for our SM. We initially obtained 287 studies that were filtered based on a set of well-defined inclusion/exclusion criteria, resulting into a set of 27 studies that were used for

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