Abstract: Current tools for Hierarchical Task Analysis (HTA) were designed to meet the specialized needs of psychologists or ergonomists, and therefore typically lack the capability to interchange data with modelling or engineering tools. As a consequence, essential information on tasks, operational processes and procedures is segregated from the development process, with the inherent risk that it is not fully taken into account. However, particularly in safety-critical systems, optimized human machine interfaces are essential to ensure safe operations, and may be decisive to guarantee a timely response. In this paper, we present our approach to bridge the gap through integrating task analysis results in a SysML model. For this study, the possibility to translate a full HTA into corresponding SysML elements was investigated, and a converter tool was implemented. The converter's output is an XML-file following the OMG XMI standard containing the HTA in SysML, which is compatible with the IBM Rational Rhapsody importing interface. Integrating the HTA results in a system modeling tool offers important additional knowledge for utilization in the subsequent System Engineering process.
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Occurences:
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