

Agent-Base Modeling of IoT Applications by Using Software Product Line

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Abstract : The Internet of Things (IoT) is used to link up real objects that use the internet to interact. IoT applications allow handling and operating the equipment in accordance with environmental needs, such as transportation and healthcare. IoT devices are linked together via a number of agents that act as a middleman for communications. The operation of a heat sensor differs indoors and outside because agent applications work with environmental variables. In this article, we suggest using Software Product Line (SPL) to model IoT agents and applications' features on an XML-based basis. The contextual diversity within the same domain of application can be handled, and the reusability of features is increased by XML-based feature modelling. For the purpose of managing contextual variability, we have embraced XML for modelling IoT applications, agents, and internet-connected devices.

Keywords : IoT agents, IoT applications, software product line, feature model, XML

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