LOOSELY-COUPLED SYSTEM DESIGN FOR MODERN HOME AUTOMATION SYSTEMS

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Home automation and Internet of Things are heavily discussed topics in the industry. This paper introduces a new design concept of a loosely-coupled system. Which addresses many major obstacles faced by system architects and developers. Suggested system is a modularized approach to minimize inter-dependency thus improving overall efficiency, performance. Prototype implementation suggests that the concept discussed is feasible and adaptable. Simplified message transmission and centralized data repository plays a major role in this conceptual design while controller circuitry and event listeners simplifies handling various tasks and functions. The same concept can be cultivated to focus on advanced technologies such as machine learning, artificial intelligence etc.

Keywords: *Home Automation, Loosely-coupled, Artificial Intelligence, Machine Learning, Data Mining.*