Design and Implementation of Smart Home Service

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Introduction and Motivation

Motivation
- The increasing need for energy conservation and life convenience are driving the global smart home market the most.
- There are lack of research and field tries on providing holistic smart home services including energy mgmt. and u-health.

System Requirements

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- Support Multi-model UI
- Based on Server-Client model
- Intelligent decision making capability
- Provide cumulative monitoring information
- Follow loosely coupled design principal

System Architecture

Conceptual Architecture of Smart Home Service

Prototype Client Applications

Smart Appliance Energy Metering and Scheduling

Smart Living Diary & Medication Service

Conclusion and Future Work

Conclusion
- Design and implement Smart Home Service, which comprises of Energy Management Service, Living Diary and Medication Service

Future Work
- Extend smart home system through adding more intelligent services