A Web–based Architecture for Usability of Service Oriented Environments

**Motivation**
1. In future, Complete Smart Home environment will contain a vendor independent platform and architecture having wide variety of devices and services from different manufacturers and developers.
2. Open Service Gateway Initiative (OSGI) tries to meet these requirements

**Problem**
1. Powerful technology does not always have user-friendly nature. As a consequent, usability of technology reduces. As an example, clumsy look of Knopflerfish OSGI Desktop may make users reluctant of using OSGI applications.
2. Centralized complex applications may not become utile for aged and special needs people.

**Goal**
1. Control or schedule any Smart Home applications on the fly.
2. Improve the quality of life of elderly and handicapped people by using distributed architecture with wireless technologies and the Internet.

**OSGI: The Framework and Extension**
1. The Service Gateway interface in figure connects client via internet even outside of home.
2. The graphical user interface called Application Management Model helps user to select devices and operations accordingly.

**Technical Challenges:**
1. Deploying Servlet/JSP in OSGI web server to send request for application service from client and to receive notification from server.
2. Making the client side Service Management System independent of device manager which implements the functionality of the devices.

**Future Work:**
Implementation of the Service Management System for WAP enabled mobile phones to make the application more dynamic and user friendly.