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Project Overview

- Targeting automation of many information-intensive tasks
- Automation requires the synergistic use of sensors, standard hardware interfaces, intelligent software and adaptive algorithms
  - Sensors provide audio, image, pressure or position input
  - Software controls actuators within appliances and also interface with other appliances
- We are building a framework that allows for rapid deployment of information-automation solutions

Progress Through December 1999

- Voice control for different physical- and info-objects
- Interface to speech server SLS-Lite to recognize specified set of voice commands
- Automation applet configures speech server with appropriate commands specific to each object
- Applet controls each object depending on the command and also receives input from the object
- Objects that have been incorporated are:
  - Web-phone (info-object)
  - Email (info-object)
  - Infra-red controller (physical object)

Research Plan for the Next Six Months

- Fully implement configurable voice control for many physical- and info-objects including:
  - Camera (physical object)
  - Phone (physical object)
  - Web sites (info-objects)
  - Position sensors (physical objects)
- Create automation scripts that will sequence through specific combinations of commands to objects so as to perform complex tasks
  - Determine best route taking into account traffic conditions
  - Fast search for information across web-sites and databases