

## the Aware Home

# Memory Mirror

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### About This Project

There are particular household items that people use for specific tasks (e.g. taking a pill, feeding the cat) and these tasks are usually simple and brief. However, these tasks become difficult to recall performing when they are repeated often and are not part of a strict routine. Memory confusion arises between the repeated episodes of frequent tasks (e.g. “Did I take my vitamin today or was that yesterday?” , “Has anyone fed the fish?” , “Did I take pain medication an hour ago, or did I decide to wait a bit longer?”)

Memory mirror reflects the use of specified objects during a period of time (e.g. 24 hours of a day). As a person uses an item, it is visually posted to the mirror and is recorded in a history log. If an item was previously used, the mirror reflects details of the previous number of usages. The memory mirror also warns of possibly lost items that have yet to be returned.

The memory mirror system uses RFID (radio frequency identification) technology. This technology is being rapidly adopted by industry as “active barcodes” for tracking inventory and tagging objects with digital information. These tags can be quite small and do not require a battery.

People frequently place particular objects in meaningful locations in their home such as organizing medications on a nightstand. The memory mirror system tracks the removal and return of each differently tagged object to and from the storage area.

### Next Steps:

We plan to experimentally deploy Memory Mirrors in home in the Atlanta area to better understand how people would incorporate this technology into their daily routines.

