Preparing for Cats and Dogs

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The Problems

1. Being unprepared for inclement weather
2. Being unable to locate weather-related attire

The Goals

1. Improve "situational awareness" of weather forecasts
2. Locating weather-related attire and items

Figure 1: A prototype of the reminder console, a summary of the main display, located at an exit door.

Related Work

•(Landry, Pierce, Isbell, 2004): We adapted their weather crawler infrastructure for our system.

•RFID (radio frequency identification – a system using low-power radio signals to transfer (read/write) data between an RFID device/tag and an RFID reader

•GPS

Conceptual System Design

Informational Displays

•Reminder console (figure 1)

•Main console (figure 2)

- Detailed weather forecast (figure 2a)
- Single-day/item finder display (figure 2b)
- Timeline display (figure 2c)

Object Identification Tags

- Weather-related items would be tagged with RFID alerting beacons (beeping)

Usage scenario

•Brandy's alarm beeps and wakes her up.
•Brandy gets up and views system (figure 2b) to see that she needs a jacket
•Brandy presses the clock on the screen to see a timeline of the day.
•The timeline indicates that it will rain at approximately 4PM.
•Brandy gets dressed, takes her jacket and umbrella knowing she will be out at 4pm.

Figure 2a: The advanced forecast view shows a ten-day forecast, the current radar, an optional monthly outlook, and a season-specific weather outlook (pollen for spring).

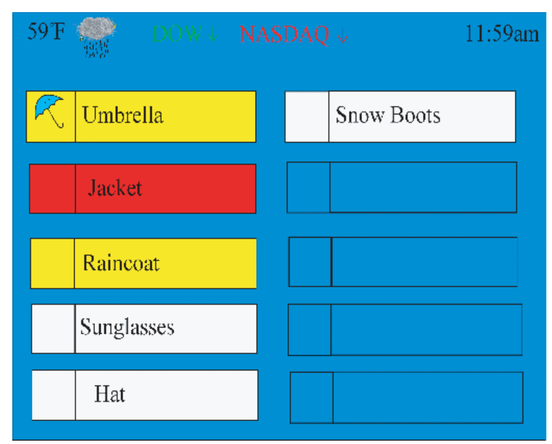

Figure 2b: A prototype of the single-day/item finder display, which is designed to provide the user with a listing of weather and the location of weather-related items around the house.

Future Work

•Would this product be helpful for you?

•Do you lose these types of items often?

•Do you often find yourself unprepared for the weather?

•Are there any other items you would add to this product?

•Is there any other specific information (besides time & weather) you would add to this display?

•Was the system easy for you to understand?

•You wake to the sound of thunder and you need to be across town in a half-hour. What do you do when you can't find your raincoat?

•You checked the forecast ten minutes before you left, but on exit you forgot to take your umbrella and now it's raining. How likely would you have been to remember if you had a reminder near your exit door?

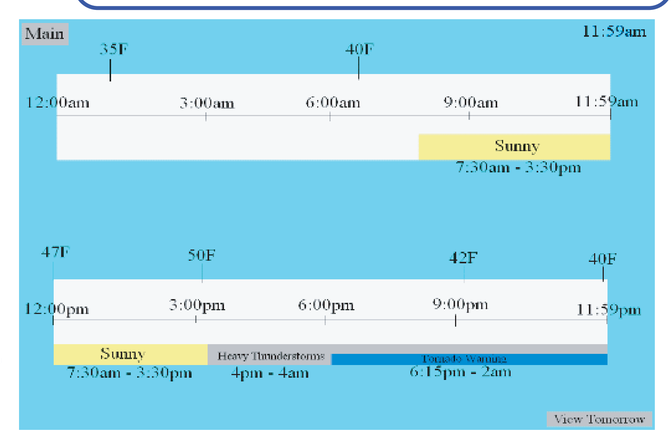

Figure 2c: A timeline view of current and upcoming weather conditions.