

# Prototype

## Dude, Where's My Stuff?

### Problem:

The destruction of a tornado or hurricane is horrific. The power of storm surge and flood water flow is awesome. The water and huge winds can result in objects being picked up and carried for miles. There is need of a system for helping people locate their missing belongings following such a disaster. It'd be a distributed Lost and Found system. It would need to support reporting and cataloging items ("I found a plastic bird..."), as well as reporting losses, and searching for lost items ("Missing, one vintage pink flamingo lawn ornament..."). It would be activated by FEMA in an emergency situation wherever disaster struck. It could be web-based, kiosk, telephone, or some combination, or something completely different. Could use existing infrastructure, or not. It could be designed in a way that facilitates the matching of lost and found reports, for successful return of items. It should not rely on a single central person who does the pattern matching. That should be distributed, automated, or both. Don't forget the issues of notifications when a match is (potentially) made.

### Description of design process:

The software used for prototyping is Balsamiq. The application is used for creating prototypes for interfaces of webpage and mobile applications. The software was ideal for creating a low fidelity mockup for a kiosk interface which is a reduced functionality web application.

The interface is designed considering the context of the users. The system will be placed in an area devastated by some calamity. It'll mostly be used by people directly affected by the disaster. *In such situation it should be noted that users will not look forward to learn using the new system.* Also he/she would try to seek help for minor doubts and issues. In such scenario the system should not be complex to use. So there is only one screen for the system and it supports both touch based as well as button based interactions. The users can be anyone with ability to understand the situation around them and are able to interact with the system without substantial assistance. The range of users is people with age between 15 - 65. Small children are not assumed to be using the system on their own, but at times a user can be of 12 years or 78 years as well.

The prototyping tool helps in implementing only screen level design and not the functional designs. Thus the performance of the system and the more accurate user acceptance cannot be evaluated.

## System Characteristics:

### Methods of Interaction:

There are two methods of interaction

1. Touch screens
2. Digital Levers

#### 1. Touch Screen:

Considering the younger users' familiarity, each kiosk has a touch screen. A user can easily and directly interact with the onscreen elements. For simple selection tasks a touch screen also tends to increase interaction speed. However older users, above 55, might not be comfortable with touch screens.

#### 2. Digital Levers/Buttons:

Resembling mechanical levers these physical elements will provide the familiarity of old mechanical systems and the efficiency of digital devices. There are four levers, 2 horizontal and 2 vertical. The left vertical lever will allow user to browse through category list, the right vertical lever helps in selecting items from the list on right. The top horizontal lever will scroll between available images and the bottom horizontal lever will scroll through the description. An item is selected upon highlight.

## Typical User Scenario:

A short walkthrough of how a user will checkout an item is described below:

1. A user is looking for her 3 year old son's teddy bear.
2. She drives to a disaster recovery camp and locates a information only kiosk
3. She then selects lookup an item option
4. She uses the left lever to select the category Toys
5. The items list on right part of screen is filtered and refreshed
6. She then uses the right lever to select the item Teddy Bear
7. She looks through the photos using the top lever
8. The teddy bear being soiled, she is not able to recognize it.
9. She then reads through the description using the bottom lever and finds that the bear is brown in color and has a tag 'happy birthday john'.
10. She identifies it to be her son's toy.
11. She selects the item and presses checkout
12. Walks to the window next to the kiosk where a person brings her the teddy bear
13. She thanks him and drives back home

## System Screens:







