

# 1b: Project Proposal – Peter Hu

## A. Problem Space

Currently, It is far too difficult to coordinate shopping trips with your housemates. Here is the scenario: You and your housemates know you are running low on eggs. The next day everybody goes to the store, does the logical thing, and buys eggs. What's left is a fridge full of eggs that no one can finish (see fig. 1). We all try to prevent this from happening, but we struggle because there is no standard way to communicate to our friends and family exactly what items we bought at a trip. It is difficult to itemize shopping trips because we have to enter text records for every item we buy. This is cumbersome and without an alternative, people won't be motivated to record and communicate what they bought.



**Figure 1: A catastrophic waste of eggs waiting to happen. Source:**  
<http://www.daveblackonline.com/DSC00749.JPG>

## B. Current Approaches

Today, some households spend time to coordinate shopping lists ahead of time in hopes of preventing redundant purchases. This is a solution but only for the items people remember to add to a shopping list. For the many people who cannot be bothered to make and use shopping lists, there is no effortless solution to turn to. Another solution to this problem today is to send a picture of our shopping receipt to our friend's phone. This is a poor solution because receipts are cryptic, include details that are irrelevant, and contain font too small to read (see fig. 2). It is difficult for the receiving party to figure out, at a glance, what items you bought and why this matters to them. Better approaches to solving this problem would ensure that it fast and easy for a shopper to identify and record what they have bought. On the receiving end, the people notified would need information that is easy to read at a glance and non-intrusive.



**Figure 2: Receipts are cryptic and hard to read at a glance.**