# **Smart Shopping List**

Josh Walker
josh@joshwalker.com
Imgen Studios
(612) 465-9255

### Concept

Add a Smart Shopping List to the Target Mobile App Lists section to enhance guests shopping and pre-trip planning experience. The list will auto-fill before each shopping trip, using past purchase history linked to the guest's Target account and Red Card. This will greatly reduce the effort of data entry and provide a better user experience than a typical list, because it can predict the items you may not even be aware of needing. In addition, showing past purchases that are currently on sale, regardless of buying frequency, will allow guests to stock up.

Leveraging iOS system wide Reminders, the list will gain two additional features: Siri integration and sharing via iCloud. This will allow access to guests when they are on the go, or just prefer voice data entry. Sharing will connect family members and help them collaborate on building the shopping list no matter where they are. It also syncs between a single person's various devices.

The list will be in a mixed format, featuring items entered in plain text (e.g. "milk", "diapers" etc) as well as specific items (e.g. "Cheerios, 24oz, \$4.79, SKU 1234567") like the entries currently on other Target lists and registries. Guests will be able to look up a particular item, so if they entered "diapers", they can search for a matching item and fill it in with "Pampers Stage 3, 150ct, \$25.99, SKU 54321" for instance.

## **Key Features**

- Auto suggest items based on prior purchases allowing quick and easy input of items, as well as offering items that may have been forgotten.
- Integration into iOS Events and Reminders system. Provides access to the Siri voice assistant. Also sharing via iCloud.
- Recommend items on sale that guest has purchased before.
- Check if items on the list are in stock at your favorite Target store.

#### Typical Use:

- 1. Guest navigates to the Smart Shopping List and selects "New Visit".
- 2. If there are existing items on the list from the previous visit, offer to clear them or keep them.
- 3. A page comes up with suggestions for items to add to the list. Guest single taps each one desired. Closes page, and list includes all the items.
- 4. Guest reviews items to confirm everything is in stock.
- 5. On way to the store, guest remembers one more thing for the list. Holds down home button and speaks "Add bread to Target list." Siri adds an entry for bread to the list.
- 6. During shopping, guest checks off items as adding them to cart.
- 7. Notices there is something new on the list that was added by another family member using the Shared List functionality.
- 8. Guest buys everything they needed and returns home triumphant!

#### **Unknowns:**

- APIs may not exist to access customer's previous purchase history. Smart List could use previous entries stored locally, but this removes the immediate benefit of Smart Suggest, since the system would need to learn over time.
- Algorithms to predict future purchase behavior based on past purchases and frequency need to be created or adapted. Though a certain amount of fuzzy logic exists in this type of system, it isn't nearly as complicated as a social recommender system used at Amazon and Netflix, etc.
- This App focuses on iOS platform, and tightly integrates with several of the frameworks. If maintaining a consistent experience between iOS and Android or other platforms is important, it may be difficult to replicate all the functionality on every platform.