# Project 9, Final Version Team 3

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## 1. INTRODUCTION

The purpose of the application being designed is to reduce food waste by connecting users in a community and share food items that may otherwise go to waste. The most effective method for users to interact with their social circle is to implement the idea as a social media application. Our target users are people who grocery shop regularly and manage their own food supply in their household. Typical social media users are between 18 and 65 years old range and overlap with the previous criteria.[1]

The following document explains reasons for adjustments made to the application based on the targeted user population, usability principles, research, or evaluations. At the end of the document is the application storyboard which shows how each page is virtually connected and an interactive PDF prototype.

## 2. **DESIGN JUSTIFICATIONS**

#### 2.1 Login/Sign Up Page

The sign up pages feature several different user feedback screens as well as a terms of service and disclaimer statement. The sign up pages appropriately ask for the user's email address and password, both of which are asked required twice for verification purposes. The user is also expected to agree to the terms of service and allow use of user location. All of these items are fairly standard for application signup pages, and these pages have been modified based on user feedback in analytical evaluations.

## 2.2 Navigation Menu

Our application utilizes a navigation menu at the bottom of the screen on main pages. This menu has been reorganized twice so far, once due to analytical evaluation feedback and the other due to gallery feedback. The first redesign used confusing names and icons, and poor ordering of the buttons. The class feedback specifically mentioned the "Profile" button from the previous prototype not making much sense as it leads to the user's inventory and not the user's profile.

The current menu features more intuitive ordering and icon names. The page the user is brought to after login, is the "Give" page, which is now represented by a shaking hands icon. This name and symbol combination is appropriate to let the user know that this is the section they post their items to give away. The second icon is "Get", which is represented by a shopping cart. This is mean to let the user know that this is where they can find local items. The Messages tab keeps its mail icon, and Friends is still an address book. The final icon is the Feed, which is now a

list icon. Feed is the least important feature in the menu, so it is last.

## 2.3 User Inventory, "Give" Page

The "Give" page is where the user manages food items to be given away to other users, and is a main feature of the application accessed on the footer menu. The majority of the page is the scrolling display of the user's food items available, and for each item users can see a picture of the item, the item title, and the item's expiration date. The items are displayed in order of expiration data and have the following options for each food item: Edit, Remove, and View Requests. Edit and Remove options allow the user to ensure that the items posted on their "Give" page is accurate due to erroneous information posted or if the item needs to be removed for various reasons.

The View Requests selection takes the user to the "Item Requests" page where they can see the list of friends and non-friends who have requested that food item with details of the request. Each user requesting the food item has their username displayed, date available to make the exchange, and the exchange location. Below this information the user can select View Message, and this takes them to Messages, or they can select Mark 'Shared' in the case that the item was given to the user.

Along the top of the "Give" page are the Add Item and the Edit Profile buttons. Upon selecting Add Item the user is taken to a page where they provide basic information to post about food items, and this information would result in the information provided being displayed on the "Give" page. The Edit Profile button is how users revise their username, profile picture, any preferred sharing locations, and information about them.

## 2.4 Browse Local Items, "Get" Page

The "Get" page is the place where users are able to search for and request food items. Users can search for an item based on food type, radius, pickup time, and expiration date. This section received little commentary from the class gallery and appears to be intuitive for users. One person did comment that the filter options were appropriate.

Our previous feature for finding food items was an interactive map. However, due to empirical evaluation feedback, this was changed to be more of an expanded search function. The map feature was removed due to requiring too many button clicks and overall being an inconvenience to the user's time.

#### 2.5 Messages

Upon entering the Messages page, the user is greeted with new unread messages of three different classifications: messages from friends, messages from unknown users, and event messages. By clicking one of the displayed options, the user is directed to an inbox specifically designated for the message category they selected. Messages that haven't been read yet are marked with a closed-red envelope while ones that have been read already are marked with an opened envelope. These changes were incorporated with the focus on maximizing information flow to enhance the user experience.

The search icon on the top left allows the user to type the name of an individual who has messaged them before to find all the messages that were sent from that specific individual. This was implemented to make it easier for the user to search through their message clutter rather than having the user have to scroll through their potentially messy inbox. A new message can be created by simply clicking on the plus button to the right of the search icon.

The message settings can be reached by simply clicking the cog icon on the top right corner. This takes the user to a page where they can choose who messages them, add or remove users who are blocked from messaging them, and delete messages. These options were added as a way to filter unwanted correspondences as well as help address some privacy concerns a user may have. During our empirical evaluation, an interviewee suggested that some users may find it inconvenient to have to constantly go back into the application to check for messages. Because of this, we incorporated a sync email option to the settings that can be toggled on or off. Having this toggled on grants the user the option to respond via their email or through the app itself.

#### 2.6 Friends

Users can access the Friends page by simply clicking the friends icon on the navigation menu at the bottom of the screen. Upon doing so, the user will be directed to a page that lists people they currently have added friends. Friends can be grouped into one of two categories: Best Friends or Friends. We decided to implement these two categories because we wanted to grant users the ability to quickly access friends that they will more than likely have more interactions with. As a result, the user will have greater flexibility and efficiency of use. To set who can be best friends or friends, the user simply navigates to the Friends Settings by clicking the cog icon. The Friends Settings gives users the options to have friend suggestions and have themselves show in other users' suggestions, to add or remove friends from their best friends list, and to completely remove a group of people from their friends list.

#### 2.7 Profile

The user's profile page has required information to facilitate the exchange of food items with others. Here users are able to see basic information about others, some they may already know, and some they could be learning about for the first time. The header displays the user's username, and just below that is the user's profile picture and their name along with the number of shares that they have participated in.

Following that is a row of icons and buttons necessary to perform the basic operations of the application with that user. First is the envelope icon which links you directly to starting a new message with the user being viewed. Next icon will show if the user being viewed is not a friend, the add user icon, and therefore gives you the option to send the user a request to add them as a friend. The third is a button, Items, which leads to that user's list of food items being offered. Lastly is the Report button, which leads to the Report User page where any issues or discrepancies regarding the user are submitted.

A square of information follows the icons and buttons regarding the user being viewed. This is information regarding their average rating earned from participating in sharing food items with other users. Then is the user's preference of what they share and if they share with friends and, or non-friends. Lastly is any customer information the user wished to display about them. At the bottom of the user profile page is a button if the user is a friend, Unfriend, and is selected if a user no longer wished to be friends with the user being viewed.

#### 2.8 Feed & Events

The Feed page is where the user can find local social activities about sharing food. Users are able to browse other users' posts if the user is allowed to view the post by the post owner. Users can utilize the search bar on the top to help find the things that most interest them. The user can also click the icon on the left side to view details for an event post, such as location, the requirement from the post owner, the current guest list, etc. One change we made is that the icon to a profile or event post is now a profile icon or an event calendar, instead of "exclamation" (!) icon. We received feedback from the class gallery that some people think the "exclamation" icon is too conspicuous. The user can click the icons to the view the profile information about the post owner or the event.

Beside that, every user can create their own event post by simply clicking the "+" button on the top of "feed & events" page. This leads to the "add event" page where the user can create their post's title, invite specific groups, write specific requests, etc. From the analytical evaluation feedback, we added a new button "create custom invite list". This button will guide the user to select specific group of people to invite to their event. The feature provides the user a higher customisation level.

## 2.9 User Help & Support

The User Help & Support page is linked via the question mark icon at the top of nearly every page after user login. This page includes frequently asked questions, reporting options, and application feedback or comments. This is a standard page for applications to ensure that users are able to receive support when needed, find answers to questions they have, and to provide feedback regarding any comments or questions that they have. For users to report other users they must select a link and then provide the required information.

## 2.10 Design Changes Since Previous Prototype

Since our last prototype submission, we have made changes to the following: application logo, color scheme, user item-share confirmation sequence, Messages section, profile page, Feed &

Events section, User Help & Support page, and the navigation menu

The color scheme and application logo have been changed to be more suited to a mature audience with calmer, more food-oriented colors. The logo and menu icons are better representations of the application and its functions. The logo was changed from an Elmo character to a group of users holding grocery baskets. The color scheme went from an 80s rainbow palette to a simpler orangey-yellow background with red accents for the buttons and menus.

This second post to the class gallery revealed that there were still improvements that could be made to the confirmation of sharing items in the application. The review in question did not leave specific suggestions, but rather questions that should be answered by the improvements. For this, we added a "Request List" page to show all user requests on a specific item, and the 'Mark Shared' option was moved to that page. The "Request List" page is a link on the "Your Stuff to Give" page. Now, the user can click on an item and see all requests along with an applicable messages link, the user profile link, dates and time slots in one place.

The changes to the Messages section have been difficult based on conflicting information from various user preferences. For this reason, we added a "Sync Messages to Email" option for the users that prefer email, and this is presented as a toggle switch for user customization. Messages are presented in the following three categories: friends, non-friends and event messages. The app also displays how many new messages are in an inbox to alert the user to check. This segregation allows users prioritize their in-app messages, and prevents any confusion regarding the message sender.

User profiles have been a work in progress through each iteration of prototype modifications. Initially a user profile was one page, but then privacy concerning information was changed due to the profile showing where the user prefered to exchange food items. A 'friend' profile and a 'non-friend' profile were added, and the location of the "add friend" icon was relocated. During a discussion board posting, feedback was provided requesting an "unfriend" feature, which was added.

The Feed & Events section was mentioned in the class discussion board regarding disapproval with exclamation icons next to the feed and event postings, and this has been changed to profile icons and calendar icons respectively. Also, per analytical evaluation feedback, we decided to implement a custom invite list feature for events.

The navigation menu icon colors were changed based on the color scheme adjustment, icon titles were modified, and also the icon selection was adjusted. The letters and icon colors are now white for readability due to the new color scheme. To ensure the user knows which icon is needed to give food and get good the titles were changed to "Give" and "Get", respectively. The "Give" and "Get" icons were changed as previously discussed in section 2.2, Navigation Menu. The icons were reordered based on importance as previously discussed in section 2.2, Navigation Menu. All of these changes received positive feedback from the gallery peer review.

#### 3. MATERIALS

## 3.1 Storyboard

See Appendix A for our storyboard.

# 3.2 Prototype

See Appendix B for our interactive PDF prototype.

## 4. REFERENCES

[1] Smith, A. and Anderson, M. 2018 March 01. Social Media Use in 2018. [Accessed 2018 Nov 15].

http://www.pewinternet.org/2018/03/01/social-media-use-in-2018

## This Week: Who Did What?

Amy: 20%

Keith: 20%

Kyle: 20%

Marc: 20%

Yihong: 20%