

CS 3200 – Spring 2019

Assignment #5 – Grocerying

Introduction

Grocerying (pronounced ‘eye-like-too-eet-out’) is American for *Grocery List*. You will create an app that can create lists of items to make your grocerying experiences simple and efficient. No more getting home and realizing you forgot to get milk and toilet paper.

The purpose of this assignment is to introduce:

- Redux
- Persistent Storage
- Navigation Service
- NativeBase Theme

Grocerying Usage

Your program will allow a user to create lists. They may have any number of lists. Each list can contain any number of grocery items. You can mark items as ‘done’. You can also delete items, or delete entire lists.

Requirements

Create a program that does the following:

1. (15 pts) Use styling throughout so it doesn’t look like just a generic text output
2. (25 pts) Main page shows a list of lists
 - a. Each list has a name, icon, and date created
 - b. Each touching a list opens the list for use
 - c. A list can be deleted by swiping to the left
 - d. A list name can be edited by swiping to the right
 - e. Option to create a new list
3. (20 pts) Create List screen
 - a. User enters list name
 - b. User selects icon. You decide on implementation. The icon is selected from a list of icons that the user can select. The images can be from:
 - i. Graphics that are part of your program
 - ii. URL
 - iii. RN Vector Icons
 - c. Select ‘done’ and opens the list
 - d. Select ‘cancel’ and return to Main Page without creating a list
4. (30 pts) List Screen
 - a. Shows a list of the items needed
 - b. Touching an item should mark it as ‘done’
 - i. Some indication should be given like graying it out
 - c. Touching an item again should mark it as ‘not done’
 - d. Items can be deleted by swiping to the left
 - e. An item name can be edited by swiping to the right
 - f. Adding items
 - i. There should be an obvious way to add an item to the list
 - ii. User should be able to type in an item or select an item from a list
5. (25 pts) Global State
 - a. Use Redux to maintain the state of the app
 - b. You can use component state only for items that do not depend on any outside data
6. (25 pts) Persistent data
 - a. Your app should maintain all data between executions of your app
 - b. Uninstalling your app deletes all data (nothing to do, it just happens)
7. (10 pts) Navigation Service
 - a. You should be able to move to/from screens properly.
 - b. This means you shouldn’t get stuck on any screen, or forced to add input that you

- changed your mind about.
- c. You must use a Navigation Service class

Bonus Points

You may earn the following bonus points. This can help you make up for lost points on other assignments. If your total assignment score is over 100% for the semester, it will be calculated as 100%.

1. **REQUIRED:** Your app should start with an alert that tells the TA which bonus point items you completed, and how many points you think you deserve for it.
2. Adding items
 - a. (5 pts) Allows user to select from a list of food items
 - b. (5 pts) Searchable list that updates as user types. If no match is found, then user can use the item they typed in.
 - c. (5 pts) Users can select to add a non-match item to the search list or not (Use and Alert or something like that)
3. Pictures with Items
 - a. (5 pts) Include a picture that is displayed with each item. You can simply use URLs of pictures you find online. Any other way is ok.
 - b. (5 pts) User can include a URL for an item that they add to the list. Any other way to add custom images is ok.
4. Deleting items from a list
 - a. (10 pts) 'Done' items are moved to a 'Done' area of the screen 3 seconds after the item is marked as 'Done'. This time gives a user a chance to unmark an item before having to scroll down to the 'Done' area to unmark.

Submission

Submit your files on Canvas. If you followed the guidelines in the class conventions documentation you will be fine.