



Requirements	Description
<b>Format</b>	Web application
<b>Target Platform</b>	iPhone 3G
<b>Student Interaction Time</b>	15-90 minutes intermittently
<b>Minimum OS Requirements</b>	iPhone OS 4.0
<b>Technological Requirements</b>	<ul style="list-style-type: none"><li>• Touch screen</li><li>• GPS</li><li>• Microphone (to enable voice recognition)</li><li>• Video playback</li><li>• Built-in speakers</li></ul>
<b>Target Audience</b>	<ul style="list-style-type: none"><li>• General consumption, unisex, ages 18-55</li></ul>
<b>Purpose</b>	Increases user efficiency when shopping for recipe ingredients on-the-fly and teaches user how to prepare new dishes.

This application has been designed for delivery on a device with a touch-screen namely (although it could easily be adapted for equipment using soft keys), the iPhone - third generation (3G). This program enables a user to select a recipe from a native list (that can be updated periodically when synched with a laptop). Initially, the user will be forced to accept a GPS TOS agreement. Upon acceptance, the app will advance to the store locator screen, they will select a store so the application can interact with the appropriate database. They [the user] will be guided through the application to select a meal category, cuisine which will prompt the program to download a list of recipes. The results list will enable the user to view more information about the recipes including viewing a photo, cooking time, nutritional information, etc. Once the user has selected a recipe, the application reaches back to the Healthy Grocery<sup>1</sup> internet database returning initial results in the form of a list of ingredients where the user will have the option to specify the types of ingredients (fresh, frozen, etc). Once the user has finalized their ingredient(s) selection, the application engages again with the database and returns a list of ingredients sorted by the location of each item by aisle number and allowing the user to tap each item or check it off as they proceed through the store. They have the option of skipping the shopping menu and going directly to the cooking instructions.

Once the user is ready to prepare the meal, they are provided the option of either audio- or video-guided directions. The both the audio and video directions may be navigated via voice command. During this section of the application, the phone will automatically set itself NOT to go to sleep.

In an effort to keep things simple, the following limitations have been imposed:

- Ingredients do not require specific brands
- The location of the products has been limited to aisles (as opposed to the aisle and shelf)
- Grocery store has been constrained its applicability to only one store chain

## Additional Considerations

The GUI (graphic-based user interface) is simple, consisting of large buttons, check boxes, icons and a simple color scheme. All of the interactions between the user and the application occur via the touch screen or voice command. Other considerations include organization (sorting and filtering) of the recipes (by style, cooking time, preparation time, number of ingredients, cost, calories, etc.)

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<sup>1</sup> For the purposes of this project, a generic store referred to as Healthy Grocery has been used in this design.

## Interface



### INTERACTION DESCRIPTION

This screen appears while the application is loading.

### NAVIGATION

None. Automatically takes user to GPS TOS agreement screen.

### OTHER CONSIDERATIONS

Sound Effect – Comical music to loop until loading is completed.

## Interface



### INTERACTION DESCRIPTION

The application requires GPS to be enabled so that the appropriate database is accessed. For privacy purposes, the user is asked allow the application to utilize this capability. Once accepted, takes user to the Store Locator menu.

### NAVIGATION

**ACCEPT** – Takes user to Meal Category Menu

**DECLINE** – Closes application

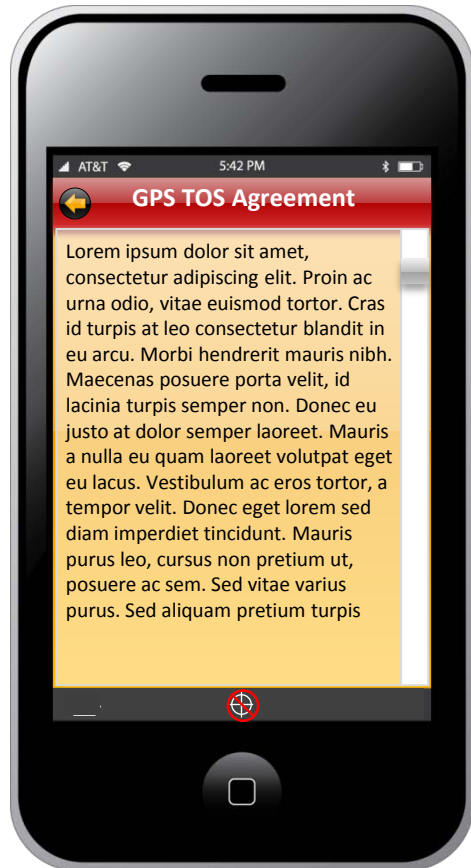
**Magnifying Glass** – Opens TOS Expanded

### OTHER CONSIDERATIONS

**DECLINE:** a pop-up window should appear verifying the selection and alerting the user that the application will close if GPS TOS agreement is not accepted.

**ACCEPT:** Enables GPS to locate closest grocery store

## Interface



### INTERACTION DESCRIPTION

Permits the user to scroll through the entire TOS agreement in full screen view.

### NAVIGATION

**Back Button** – Takes user to previous screen

### OTHER CONSIDERATIONS

## Interface



## INTERACTION DESCRIPTION

User select a store location so the application knows which database to access and enables the user to interact with Google Maps to obtain directions to the store. (Note: With the release of iPhone OS 4, users will be able to multi-task and return to an open application after they are done with Google Maps (or any other application for that matter).

## NAVIGATION

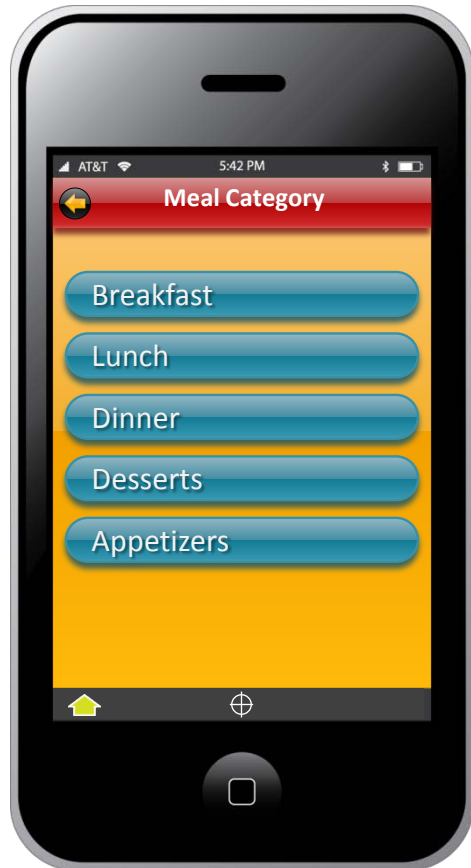
**Home Button** – Clears all selections and goes to the Main Menu

**Map View** – Engages with google maps to display catographic image in relation to the location of the user. The user may select a location, the application will automatically locate the appropriate database and advance to the MEAL CATEGORY screen.

**Locations** – The user may select a location by simply tapping directly on the text. The application will automatically locate the appropriate database and advance to the MEAL CATEGORY screen.

## OTHER CONSIDERATIONS

## Interface



### INTERACTION DESCRIPTION

Once the user selects a category, the application will navigate to the **Cuisine Screen**.

### NAVIGATION

**Home Button** – Clears all selections and goes to the Main Menu

**Back Button** – Returns to previous screen

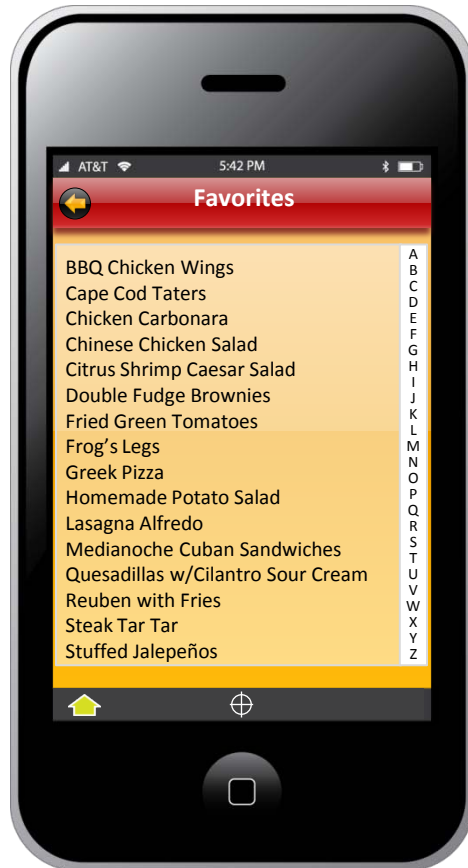
**Breakfast, Lunch, Dinner, Appetizers, Desserts** –

- ON SELECT - Applies MEAL CATEGORY filter via Internet service to online database.
- Navigates to the Cuisine Screen

### OTHER CONSIDERATIONS

For the purposes of this exercise, the user will select DINNER.

## Interface



## INTERACTION DESCRIPTION

The user is prompted to select a recipe. By selecting a recipe, the application navigates to the INGREDIENTS slide which also provides the user with other information about the dish and the option to shop or cook.

## NAVIGATION

**Home Button** – Clears all selections and goes to the MAIN MENU

**Back Button** – Returns to previous screen

**Recipes** – Opens INGREDIENTS screen

**Scroll Bar** – Allows user to scroll quickly through longer lists

## OTHER CONSIDERATIONS

## Interface



## INTERACTION DESCRIPTION

The user is prompted to select a cuisine.

## NAVIGATION

**Home Button** – Clears all selections and goes to the Main Menu

**Back Button** – Returns to previous screen

**Cuisine Buttons** –

- Applies CUISINE filter to RECIPE database.
- Navigates to list of recipes generated by database via Internet

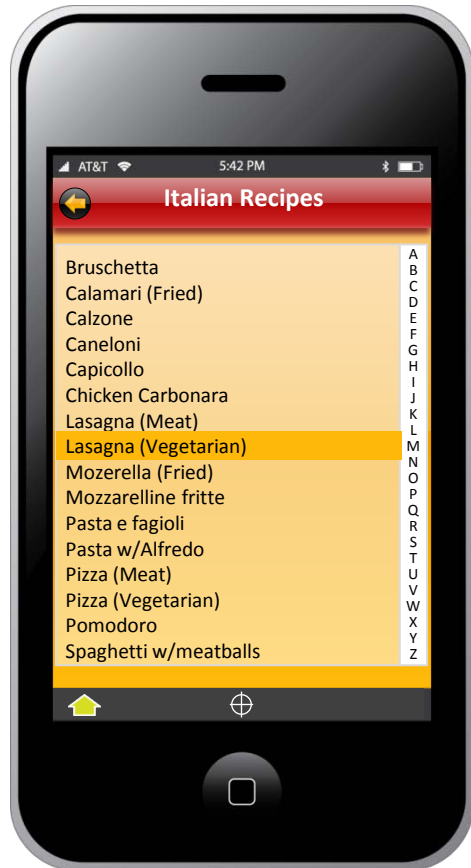
**Favorites** – Opens up list of user's previously marked favorite recipes.

## OTHER CONSIDERATIONS

For the purposes of this project, we will be selecting ITALIAN cuisine.



## Interface



## INTERACTION DESCRIPTION

The user is prompted to select a recipe. By selecting a recipe, the application navigates to the INGREDIENTS slide which also provides the user with other information about the dish.

## NAVIGATION

**Home Button** – Clears all selections and goes to the MAIN MENU

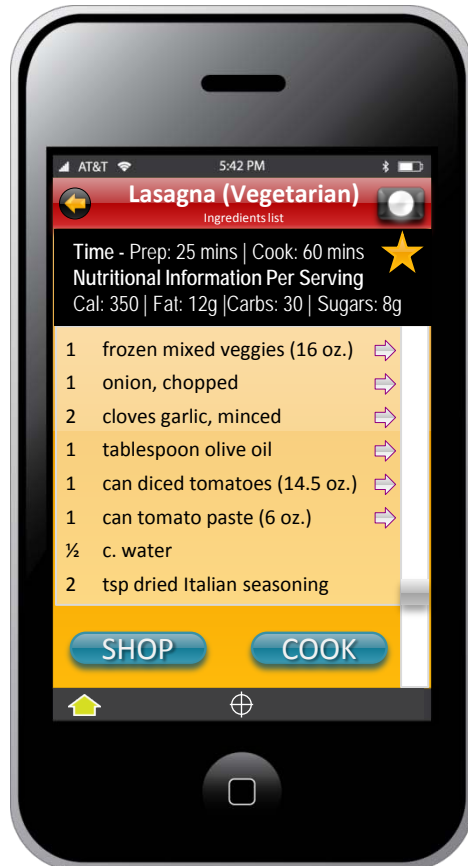
**Back Button** – Returns to previous screen

**Recipes** – Opens INGREDIENTS screen

**Scroll Bar** – Allows user to scroll quickly through longer lists

## OTHER CONSIDERATIONS

## Interface



## INTERACTION DESCRIPTION

This is a list of the ingredients along with information about preparation and cook times and nutritional information for the recipe. Items with an option arrow allow the user to select specific ingredients, types of vegetables, etc.

The user then has the option of selecting specific ingredients where applicable, tapping the SHOP button to go to the GROCERY LIST screen or they may tap on the COOK button to go directly to the preparation menu.

## NAVIGATION

**Home Button** – Clears all selections and goes to the Main Menu

**Back Button** – Returns to Cuisine Menu

**Option Buttons** (↔) – Allow the user to select specific products such as frozen or fresh ingredients

**Scroll Bar** – Allows user to scroll through ingredients more quickly

**Camera** – Displays a pop-up image of the prepared dish

**Shop** – Accepts user's selections and returns to the shopping list after engaging with the online database resulting in a shopping list sorted by aisle number

**Cook** – Opens the text-based Cooking Instructions page

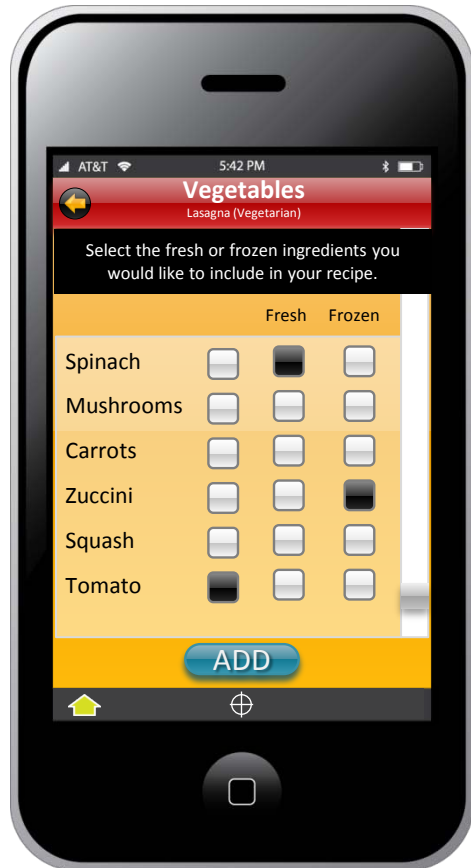
**Favorite (Indicator)** – The ★ icon indicates that the user has marked this particular recipe as a favorite

## **OTHER CONSIDERATIONS**

Example of image pop-up with close button



## Interface



## INTERACTION DESCRIPTION

The user selects the types of vegetables they would like to include in their recipe including whether they would prefer them to be fresh or frozen.

## NAVIGATION

**Home Button** – Clears all selections and goes to the Main Menu (slide 4)

**Back Button** – Returns to Ingredients Menu without adding the custom selections.

**Options Buttons** (/) – Allow the user to select specific products such as frozen, fresh, or canned ingredients

**ADD** – Adds the selected ingredients to the ingredients list and returns the user to the previous screen.

## OTHER CONSIDERATIONS

## Interface



## INTERACTION DESCRIPTION

This is the grocery list as generated in order by aisle for the user to progress through. After collecting each item, the user taps on each ingredient thereby removing it from the list.

Once shopping is complete, the application will automatically advance to the COOK page.

## NAVIGATION

**Home Button** – Clears all selections and goes to the Main Menu

**Back Button** – Returns to previous screen

**Removal Button** ( ) – Removes the ingredient from the list

**Favorite (Indicator)** – The ★ icon indicates that the user has marked this particular recipe as a favorite

## OTHER CONSIDERATIONS

## Interface



## INTERACTION DESCRIPTION

This is a list of the ingredients for the recipe. Items with an option arrow allow the user to select specific ingredients, types of vegetables, etc.

## NAVIGATION

**Home Button** – Clears all selections and goes to the Main Menu

**Back Button** – Returns to Cuisine Menu

**Favorite (★)** – Adds this recipe to the user's favorites menu

**Video (📺)** – Takes user to video guided instructions

**Audio (🎤)** – Takes user to audio guided instructions

## OTHER CONSIDERATIONS

Since I do not actually have a video or audio instructions recorded, the interface slides for those actions have not been included.

# Navigation Sequence

