Smart Waiter Detailed Design

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Template

This document uses Volere Template for its organization.

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4.1   Ordering Functions

Below are function descriptions that are necessary for ordering in Smart-Waiter. As explained in System Architecture, there are three primary classes used to hold all vital information regarding menu information. These are: MenuCategories, MenuItems and User. These three classes are used to provide a user with a full menu of a particular restaurant and allow them to place an order.

4.1.1   Parsing Function

A parsing function was created to parse through received JSON response to save information in appropriate classes. Stated below is sudo code for this JSON parser. This function will parse through a JSON request. View if the key equals "categoryname". If so, save the value within MenuCategories class under . Also, if the key equals "categorypic" save the value within MenuCategories class under pi
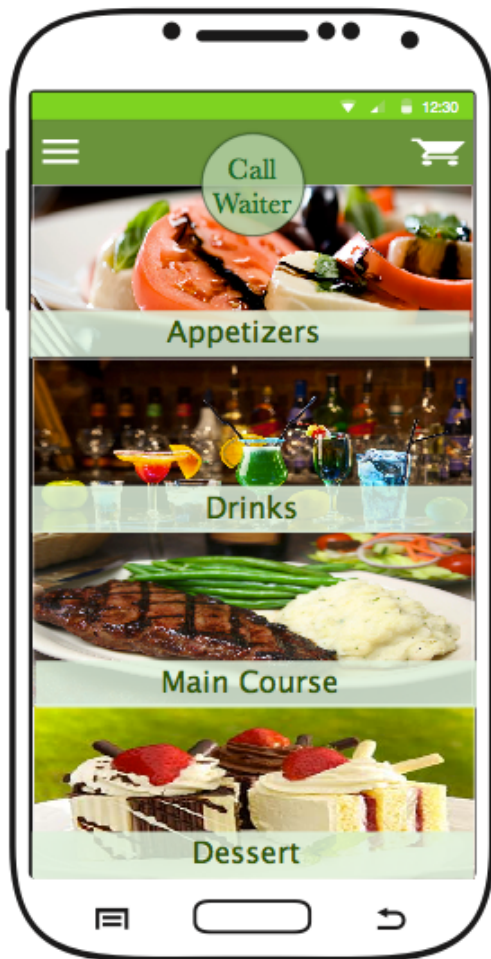
function parse throws exception corrupt define categoryArrayList Save JSON response as list of hash map array for (each element in hash map list) while (each array element with list) if(key equals categoryname) Create MenuCategories object, save category name if(key equals "categorypic") use MenuCategories object, save category name add created MenuCategories object to categoryArrayList
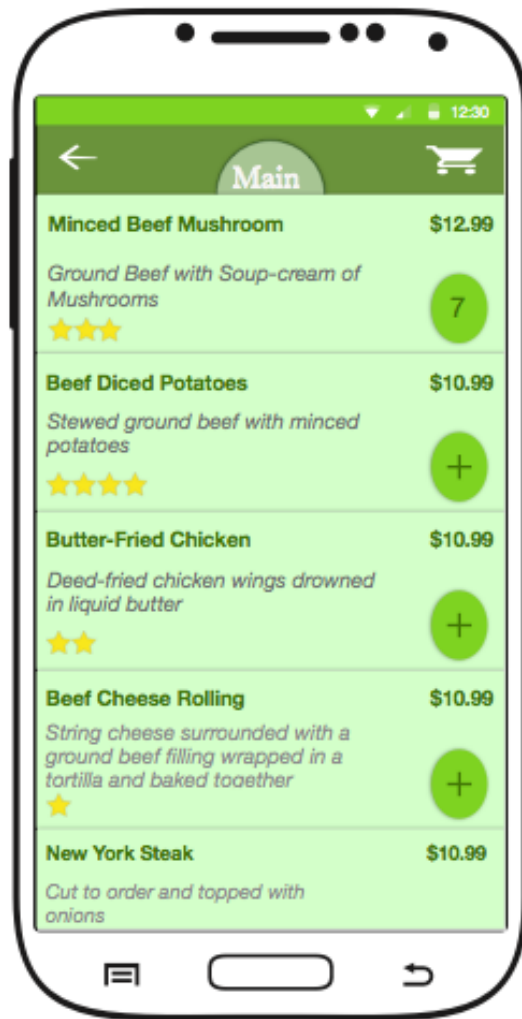
4.1.2

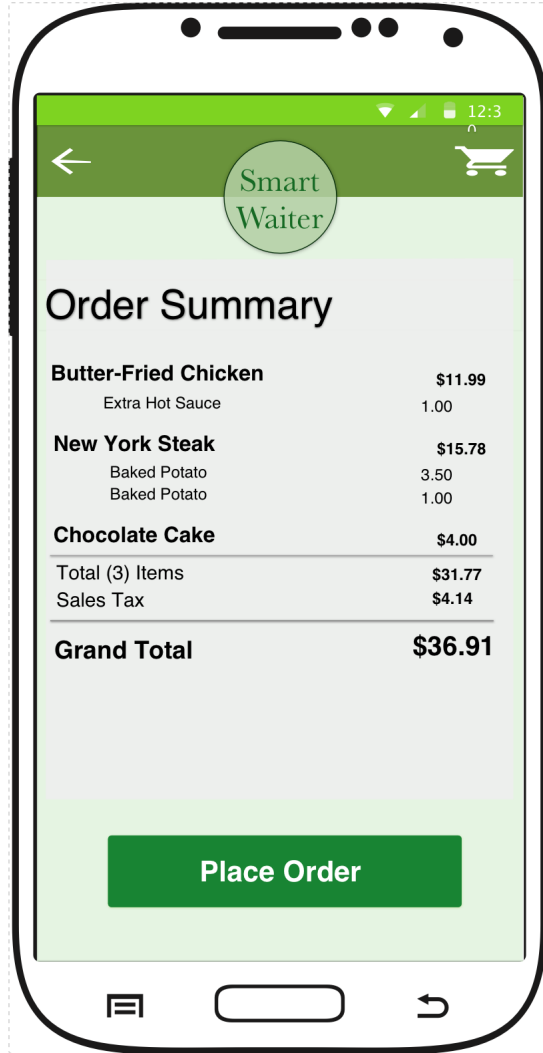# 5 User Interface Design

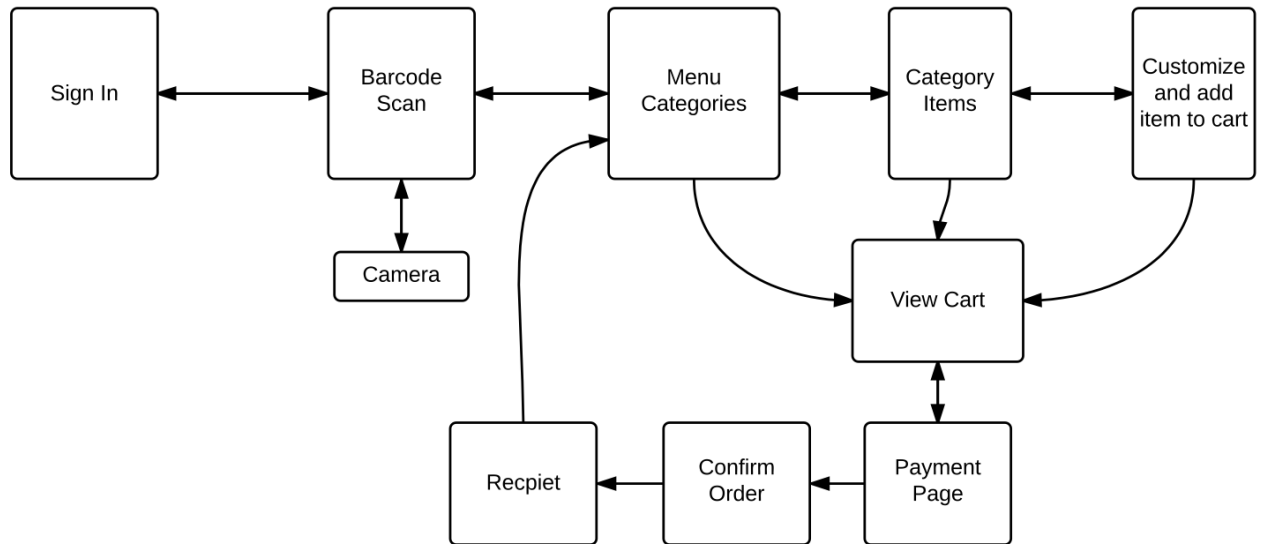## 5.1 User Interface Design Overview

5.1.1 Menu Categories

5.1.2　Menu Items

5.1.3 Confirm Order

5.2 User Interface Navigation Flow

5.3 Use Cases

5.3.1 Sign In Page

User Input	System Response
Enters correct user name and password	Application transitions to Barcode Scan page
Enters incorrect user name and password	Toaster displayed reading "incorrect login, please try again"
Enters incorrect user name	Toaster displayed reading "incorrect login, please try again"
Enters incorrect password	Toaster displayed reading "incorrect login, please try again"
Clicks "Skip Sign in"	Application transitions to Barcode Scan page
Clicks Back Button on phone	Application Quits

5.3.2 Barcode Scan Page

User Input	System Response
Clicks Scan Barcode	Application transitions to camera so user can scan code. If successful, application will transition to menu page. Otherwise will return to scanning page and display a toaster reading, "please try again"
Clicks back button on phone	Application transitions to Sign in Page

5.3.3 Menu Categories Page

User Input	System Response
Clicks category	Application transitions Category Items
Clicks back button on phone	Application transitions to Barcode Scan

5.3.4 Category Items Page

User Input	System Response
Clicks Item	Application transitions to Customize Item
Clicks back button on phone	Application transitions to Menu Categories

5.3.5 Customize Item Page

User Input	System Response
Ticks check boxes	None
Enters special instructions in input field	None
Clicks "Add to Cart"	Transitions to cart page and populate list with item
Clicks back button on phone	Application transitions to Menu items

5.3.6 Cart Page

User Input	System Response
Clicks "Delete"	Deletes item from list
Clicks "Submit Order"	Transitions to payment page
Clicks back button on phone	Application transitions to previous page

5.3.7   Payment Page

User Input	System Response
Input valid credit card and clicks "Process"	Transitions into Confirm Order page
Input invalid credit card and clicks "Process"	Toaster displayed reading "invalid credit card"
Clicks back button on phone	Application transitions to previous Cart Page