iOS Assignment

Macy’s Sample iPhone app

Design and Implementation Approach Document

Created by – Sameer Ghate (407831)

Date – February 4, 2014

**Design Approach**

Application starts with a navigation controller and ViewController class as its root view.

ViewController class is the home page where all the deals/offers and various app features in form of tiles are placed.

UI Controls hierarchy from top-to-bottom is as follows-

1. **UIImageview** - holds Macy's logo.

2. **UISearchBar** - for search functionality.

3. Besides search bar - Scan button to scan barcode.

4. **UITableview** - Contains offers/tiles.

Custom cell

**TilesCustomCell** - A custom cell to hold 3 tiles that can be re-used when more tiles are required.

**Implementation Approach**

Since the layout required was in format where one offer image on top followed by tiles and then remaining tiles below them, UITableview will easily serve the purpose.

2 arrays -

**offersArray** - contains list of offers.

**tilesArray** - contains list of tiles that needs to be placed below the first offer.

Combination of the above 2 arrays will help in determining the number of rows required in the table view.

At **cellForRowAtIndexPath** method,

1. The first check for index path zero where first offer image would get placed.
2. Next iteration places the tiles. This calls setupTilesCustomCellRowForTableview that calculates number of tiles to show in a particular cell. This method also adds target to push to next view controller (SecondViewController).
3. The third check places the rest of the offer images in the rows below.

**SecondViewController**

This view controller appears when a user taps on any of tiles/cells in a tableview of ViewController screen.

- This singleton class creates a single instance of SecondViewController that handles the tap count whenever it gets instantiated.

- Every time a counter \_callCount increases by 1 and at viewWillAppear the updated count is then displayed on the screen.