

## Homework #4– Simple Contacts App

CIS657 – Spring/Summer 2015

Due Date: 6pm, May 21, 2015

### Learning Objectives

- Developing familiarity iOS table view controllers and navigation controllers

### Creating A Simple Contacts App

You are to create a simple contacts app that will display a set of contacts that are loaded from a JSON string stored in a file.

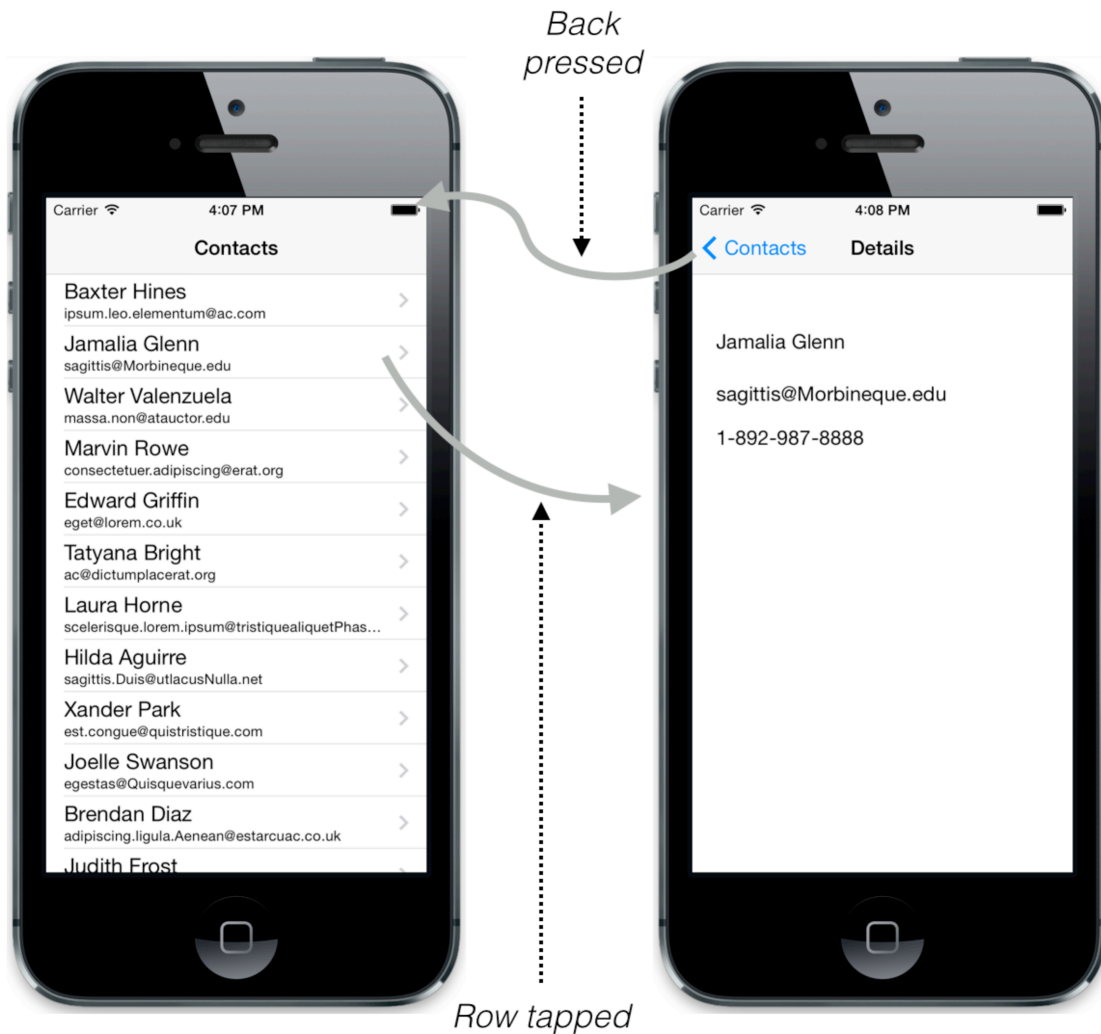


Figure 1. The Contacts App in action!

The user can scroll through the list of contacts on the screen. If they tap on one, a detail view shows the contact's name, email, and phone number. If the user pressed the back button on the nav bar, they return to the list of contacts.

The data to be used in the app is provided in the form of a text file containing JSON formatted contact information. (See Blackboard). You can drag this file into your project. In the viewDidLoad method of your table view controller, you can open and proceed to parse the JSON file:

```
// open and parse a file named data.json dragged into my iOS project
var filePath = NSBundle.mainBundle().pathForResource("data", ofType:"json")
var data      = NSData(contentsOfFile:filePath!)
var parseError: NSError?
let parsedObject: AnyObject? = NSJSONSerialization.JSONObjectWithData(data!,
                                options: NSJSONReadingOptions.AllowFragments,
                                error:&parseError)
if let topLevelObj = parsedObject as? NSDictionary {
    // you need to research what code to put here, based on the structure of the json file.
}
```

At this point, parseObject holds the parsed data. You will need to do a bit of research to figure out how to complete the parsing code. You can use the array of all contacts as your model for your table view controller. The  $i^{\text{th}}$  entry of this model (also an array!) would become the model of your detail view controller when the  $i^{\text{th}}$  row is tapped. You can set your detail controller's model in the prepareForSegue method of the table view controller, as demonstrated in class.

You only need to support the iPhone (not iPad). The only supported screen orientation is portrait.

## Edit Capability

Add the capability to delete contacts from the table view. Since the view data is loading from the file, anything you delete in a single session will reappear. That is ok, you do not need to update the data.json file!

## Deliverables

To receive credit for your homework, you must:

- Provide a demo of your app running to the instructor in the classroom on the due date.
- Submit a zip archive of your entire project folder to BlackBoard.