

# BusLinc Final Report

Android StarPhone Team

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May 2, 2011 (7:30 AM)

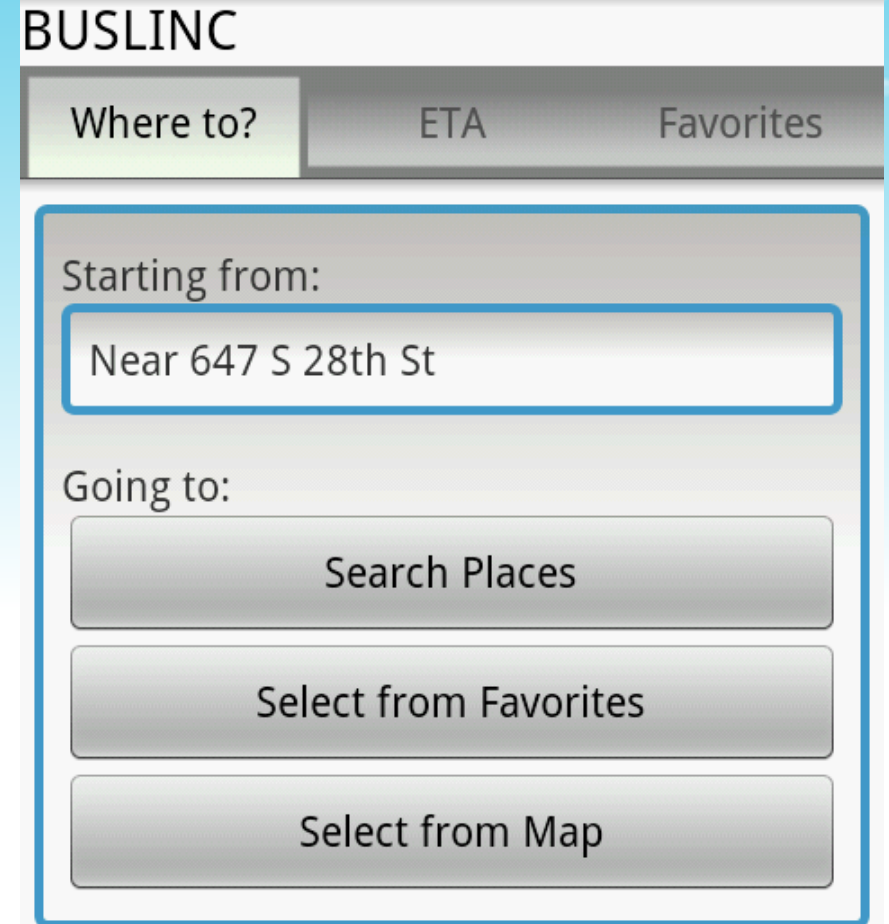
# Presentation Overview

- Implemented Features
- Unimplemented Features
- Improvements
- Demo
- Testing
- Future Work
- Questions

# Implemented Features

## 'Where to?' Activity

- Reverse Geo-coding to get user's current location
- Pick a place to go three ways:
  - Search Yahoo! places
  - Select from your Favorites
  - Drop a pin on a Google map
- Ad space



The screenshot shows the BUSLINC application interface. At the top, there's a header bar with the title 'BUSLINC'. Below the header, there are three tabs: 'Where to?' (which is selected and highlighted in green), 'ETA', and 'Favorites'. The main content area is titled 'Starting from:' and contains a text input field with the value 'Near 647 S 28th St'. Below this, there's a section titled 'Going to:' which contains three buttons: 'Search Places', 'Select from Favorites', and 'Select from Map'. A blue rectangular box highlights the 'Starting from:' section and the 'Going to:' section. A blue arrow points from the 'Ad space' bullet point in the list to the bottom of the application interface.

# Implemented Features

## 'Where to?' - Search Places

Go pizza

Starting from:  
Near 647 S 28th St

Going to:

Search Places

Select from Favorites

Little Caesars Pizza  
965 S 27th St, Ste A  
Distance: 0.19 miles

Valentino's  
3310 A St  
Distance: 0.72 miles

Big Sal's  
838 N 27th St  
Distance: 1.01 miles

Piezanos  
2740 South St  
Distance: 1.04 miles

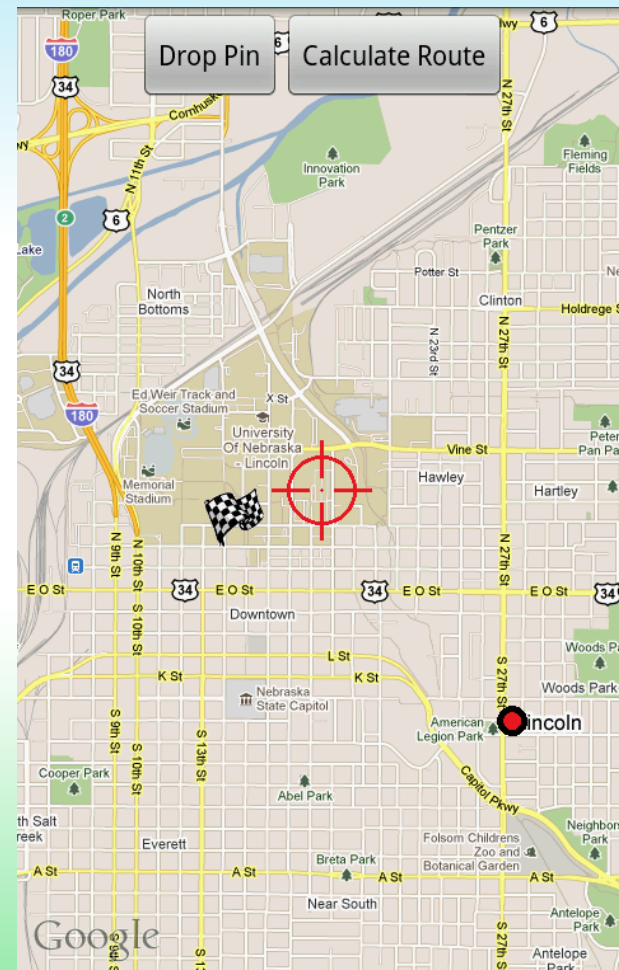
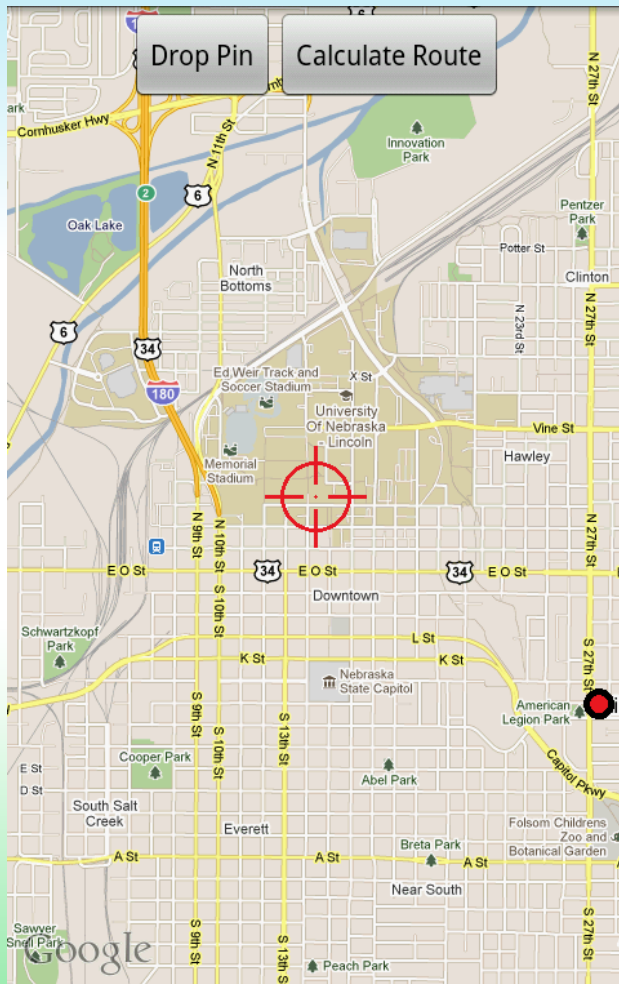
Papa John's Pizza  
1601 Q St, #C  
Distance: 1.05 miles

Via Yia  
1423 O St  
Distance: 1.09 miles

Lazzaris Pizza

# Implemented Features

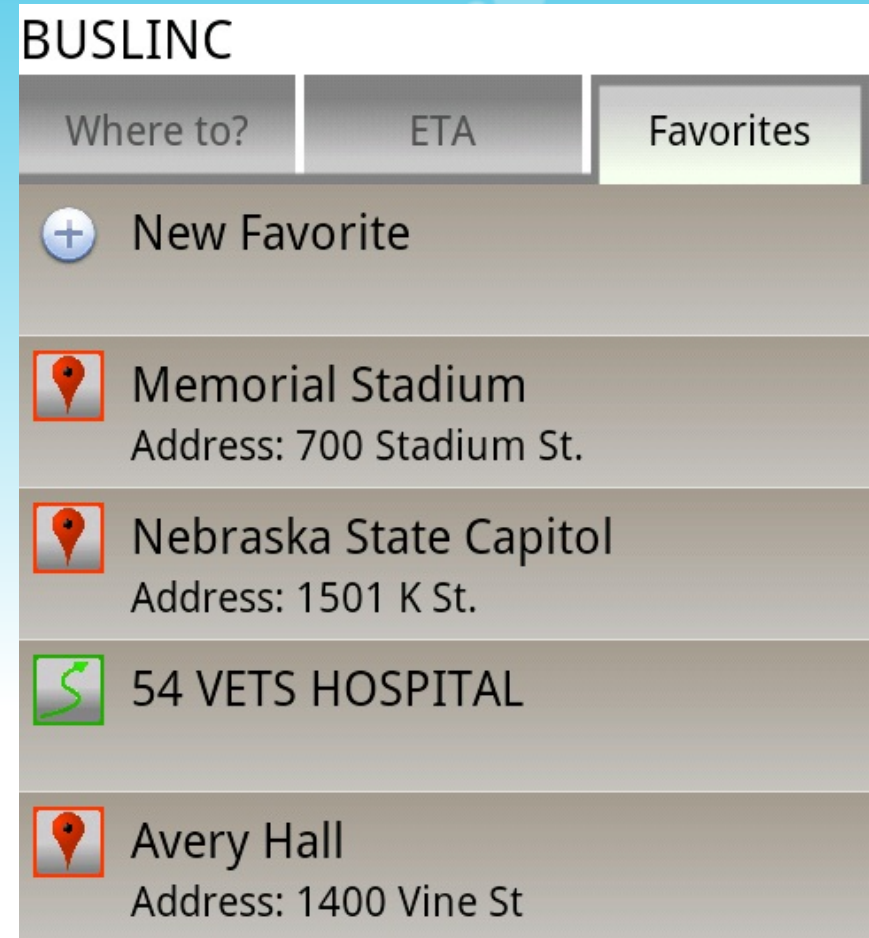
## 'Where to?' - Select from Map



# Implemented Features

## 'Favorites' Activity

- User can save favorite destinations or favorite routes



# Implemented Features

## Create and Edit Favorites (Destination and Routes)

### Create New Destination

Name:

Address:

Select from a map

Ok Cancel

### Create Route Favorite

Route

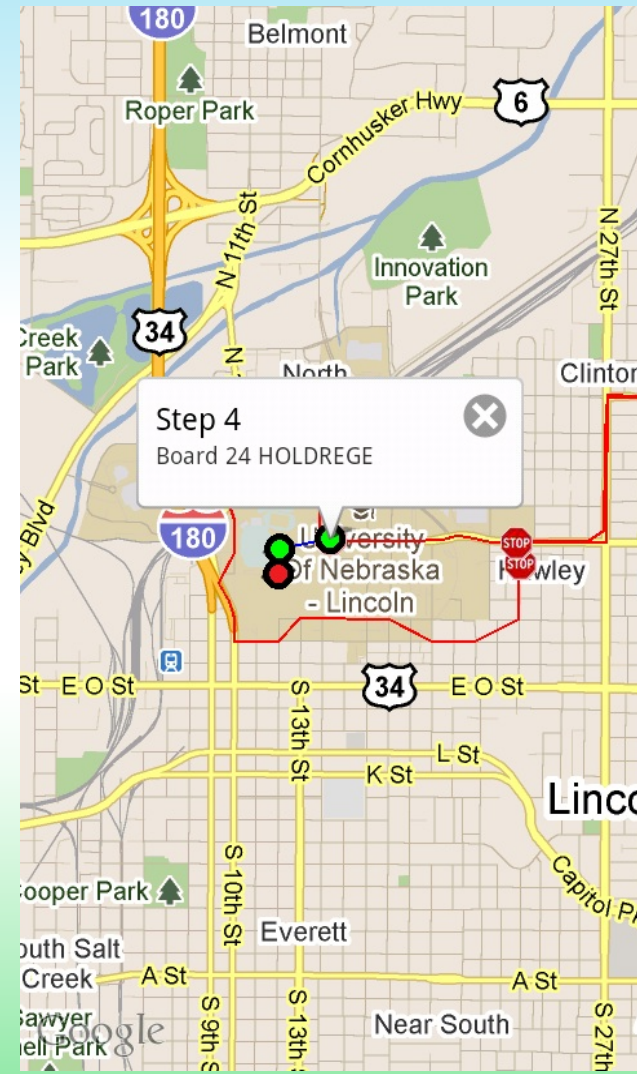
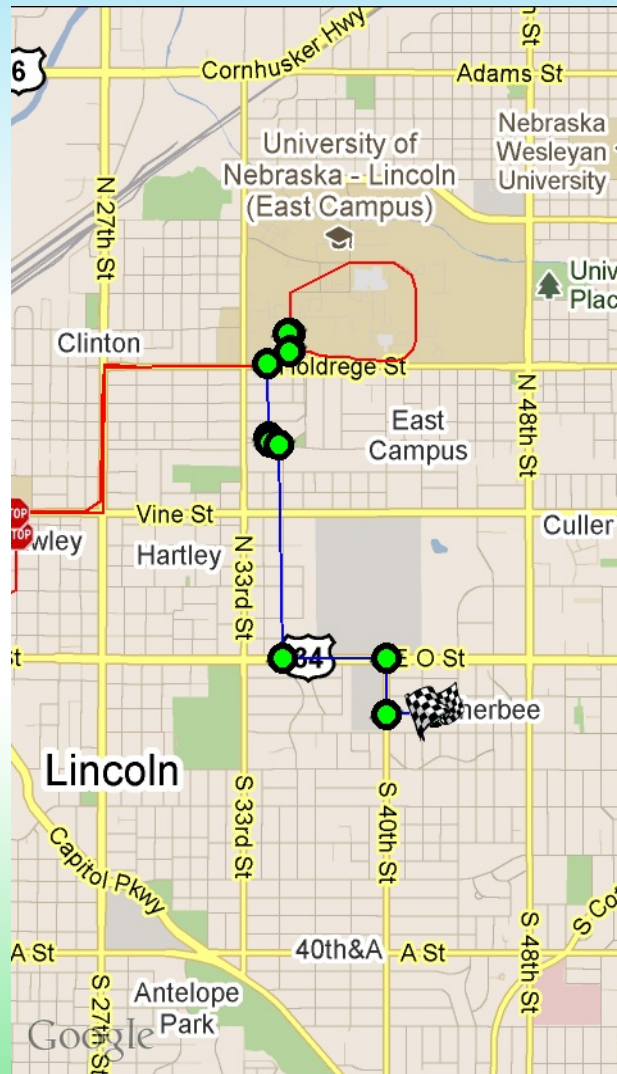
54 VETS HOSPITAL ▼

Ok Cancel



# Implemented Features

## Walking route and directions





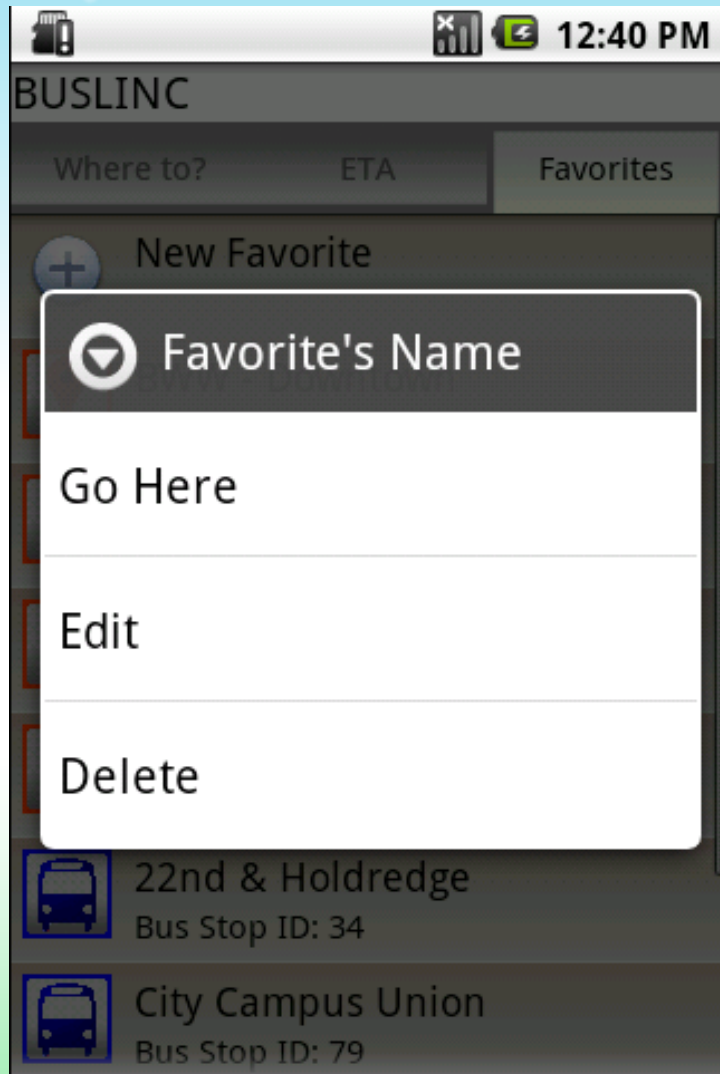
# Unimplemented Features

We were unable to implement the following:

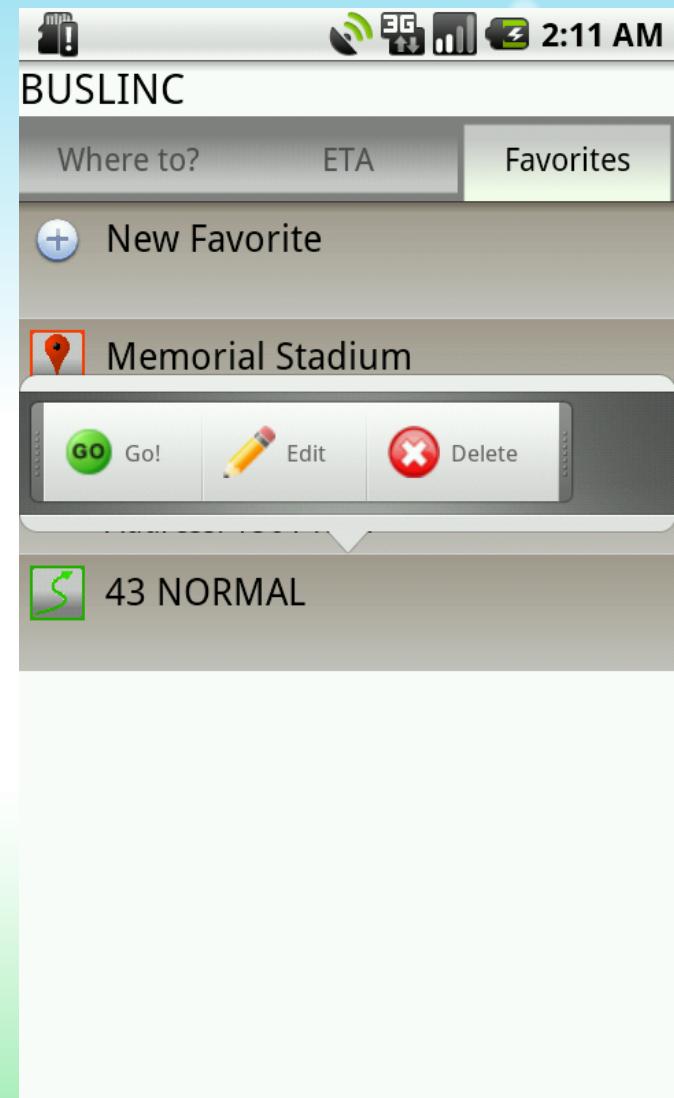
- ETA Feature (One of our main features)
- Alerts when your bus is near arrival
- Alerts when you have almost arrived at your stop
- Resolutions for various Android devices
- Professional Quality Images
- Save Favorite destinations from Map

# Improvements

Old:

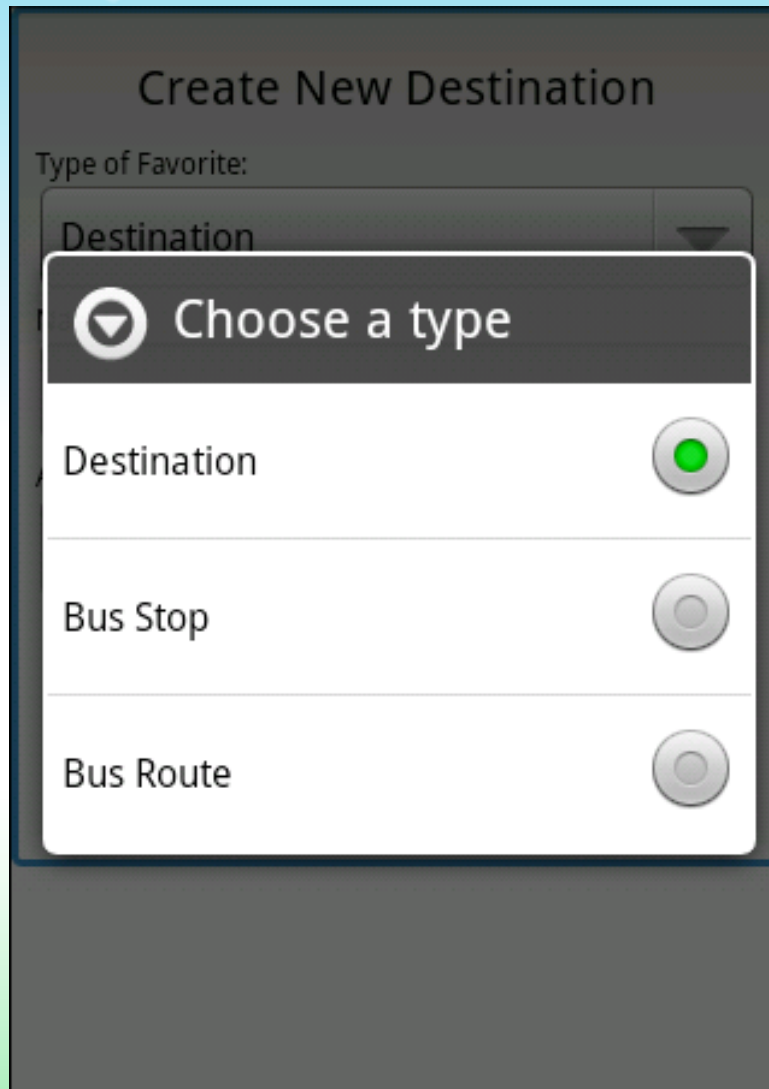


New:

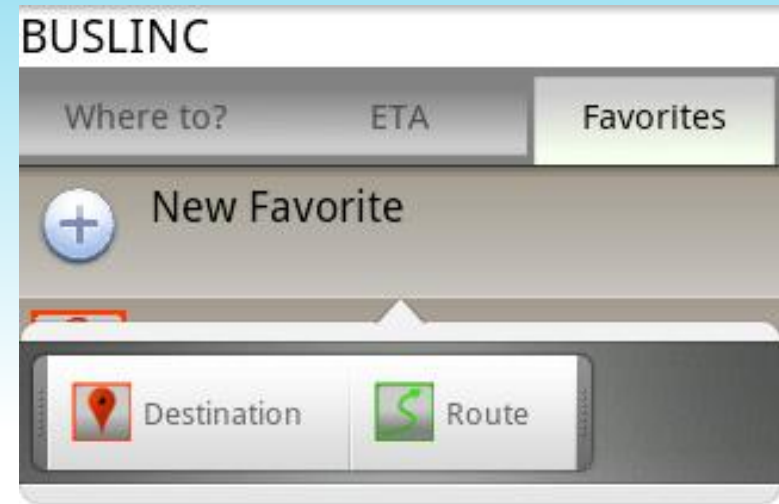


# Improvements

Old:

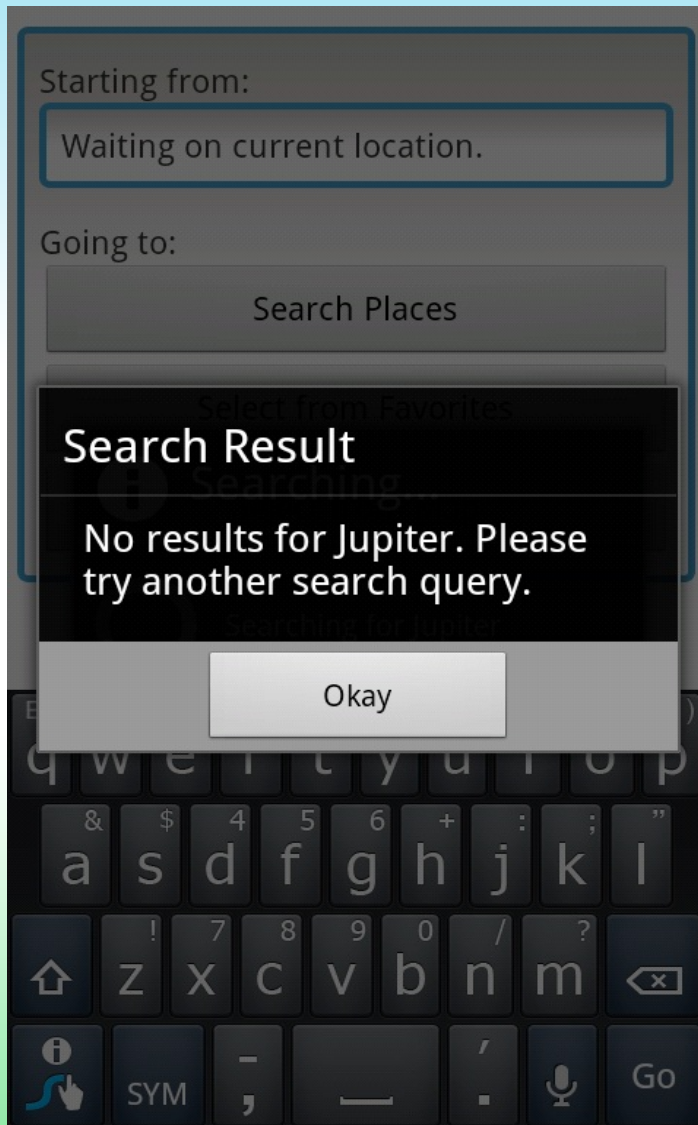


New:

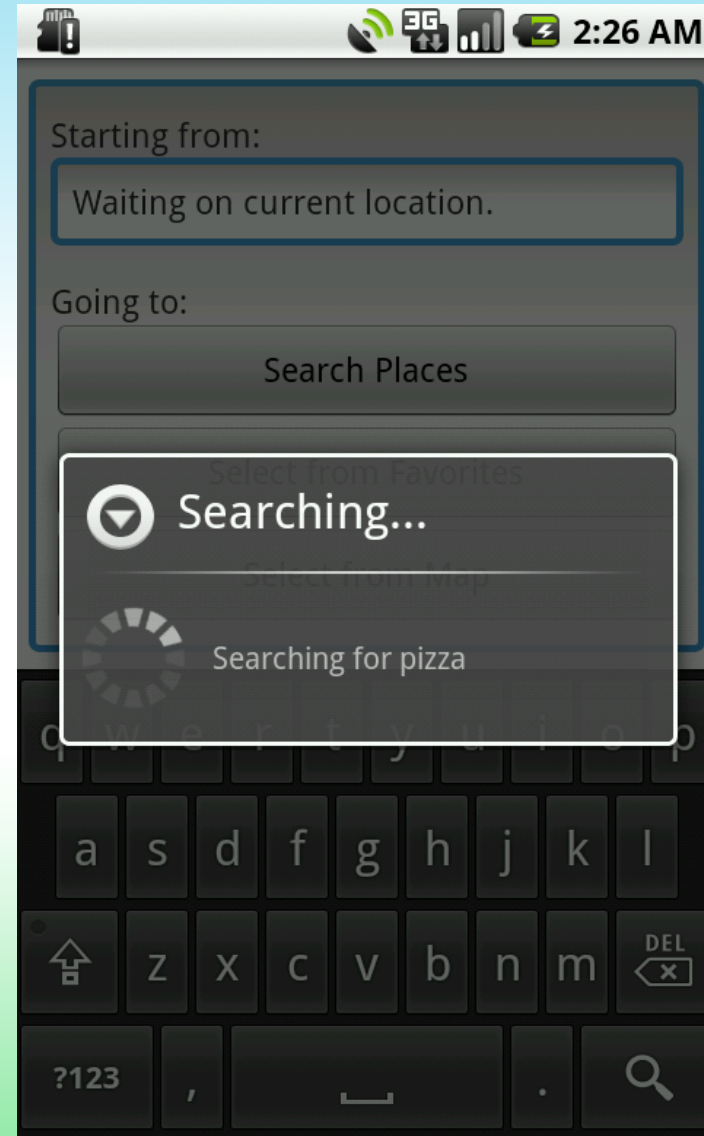


# Improvements

Can handle no results



SPINNERS!





# Demo

Stand by...



# Testing

Tested the server with shell scripts.

Tested units using J-Unit

Tested system with MonkeyRunner



# Testing

## What is MonkeyRunner?

- It's an API
- Opens up script in Jython (Java Python)
- Uses API to run script on MonkeyDevice
- Can install the app, open the app, make inputs, and take screen shots

# Testing

```
from com.android.monkeyrunner import MonkeyRunner, MonkeyDevice

device = MonkeyRunner.waitForConnection()
device.installPackage('C:/Users/Evan/workspace/BusLinc/bin/BusLinc.apk')
package = 'com.transit.BusLinc'
activity = 'com.transit.BusLinc.SplashActivity'
runComponent = package + '/' + activity
device.startActivity(component=runComponent)

MonkeyRunner.sleep(10)

device.touch(100,350,'DOWN_AND_UP')
MonkeyRunner.sleep(2)
device.type('pizza')
device.press('KEYCODE_ENTER','DOWN_AND_UP')
MonkeyRunner.sleep(4)
device.touch(100,100,'DOWN_AND_UP')
```

# Testing

```
from com.android.monkeyrunner import MonkeyRunner, MonkeyDevice
```

```
device = MonkeyRunner.waitForConnection()
```

```
result = device.takeSnapshot()
```

```
result.writeToFile('shot.png','png')
```

# Future Work

- High Quality Images that we have copyright to
- Writing/Customizing the Balloon Map Overlays
- Implement ETA Feature
- Allow destinations to be saved from the map
- Implement Alerts
- Field Testing of the app

The top corners of the slide are decorated with clusters of light blue and white bubbles of varying sizes, creating a soft, aquatic feel.

# Questions?