BusLinc Final Report

Android StarPhone Team
John - Evan - Josh
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

BUSLINC

Where to?	ETA	Favorites

Starting from:

Near 647 S 28th St

Going to:

Search Places

Select from Favorites

Select from Map
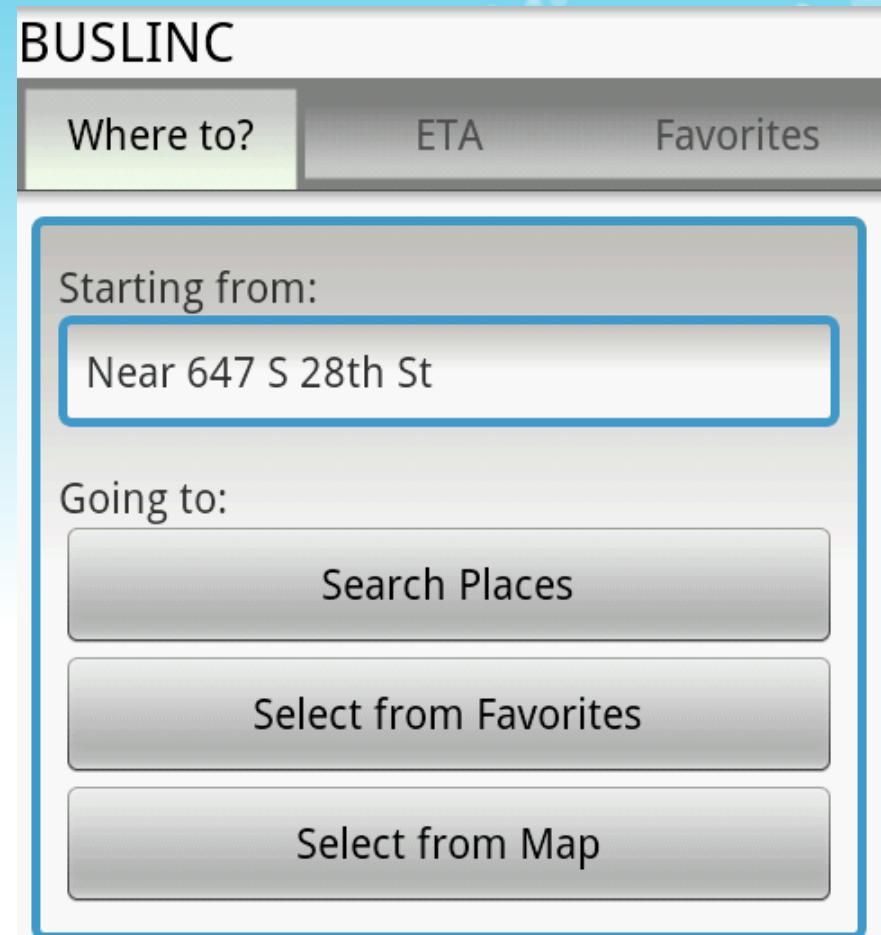
Implemented Features

'Where to?' - Search Places
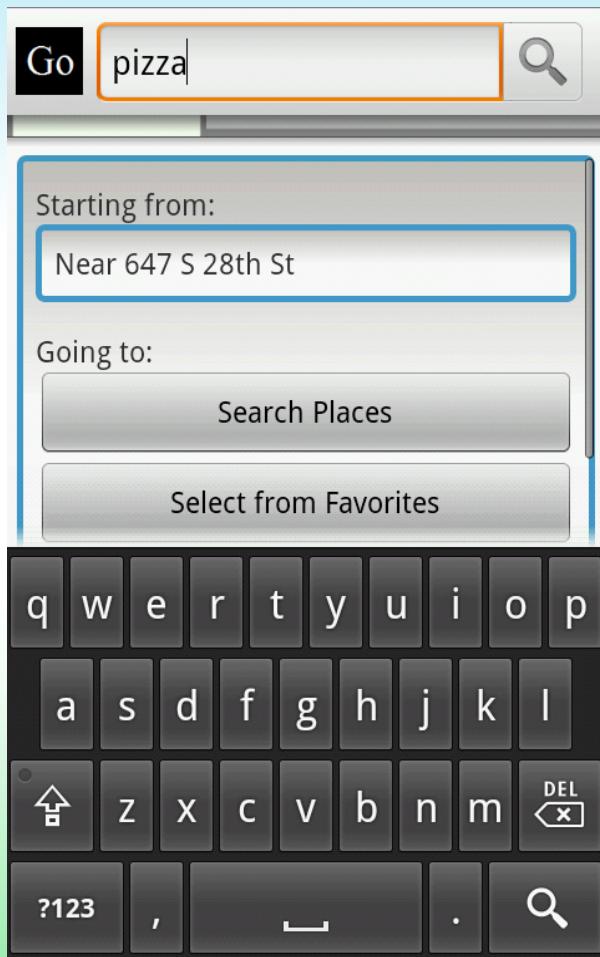
Implemented Features

'Where to?' - Select from Map
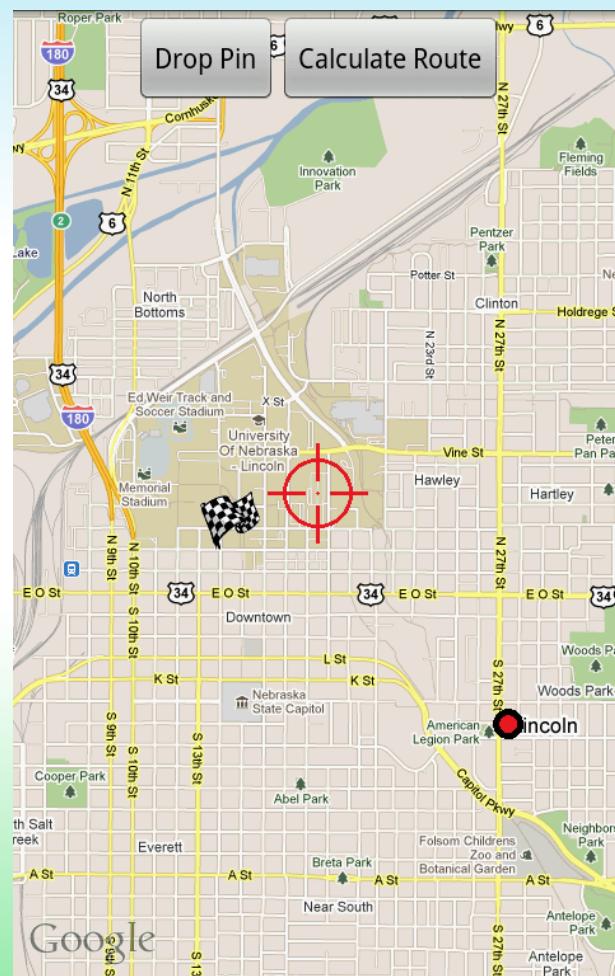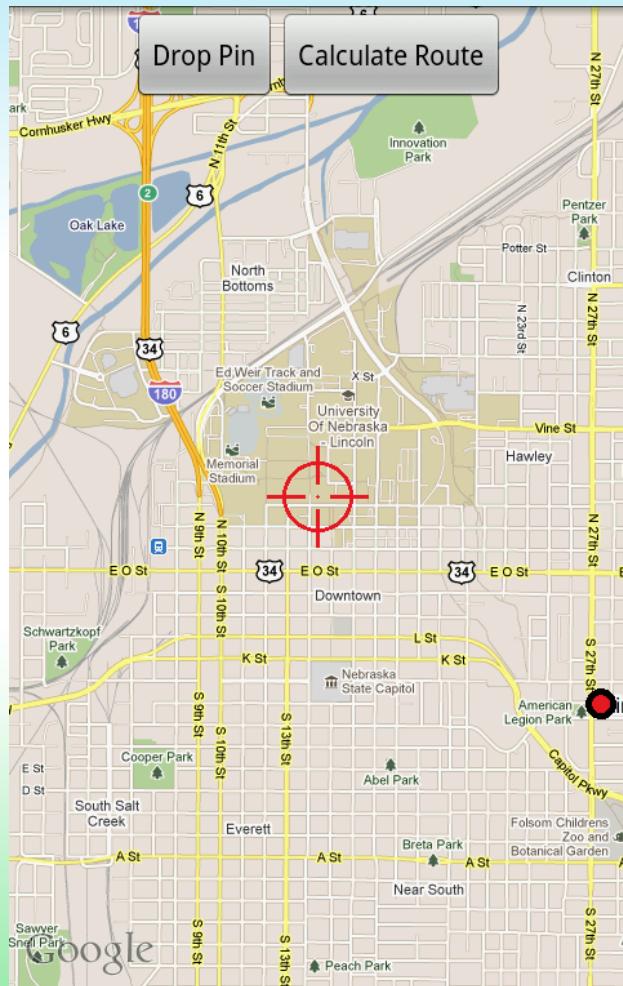
Implemented Features

'Favorites' Activity

- User can save favorite destinations or favorite routes
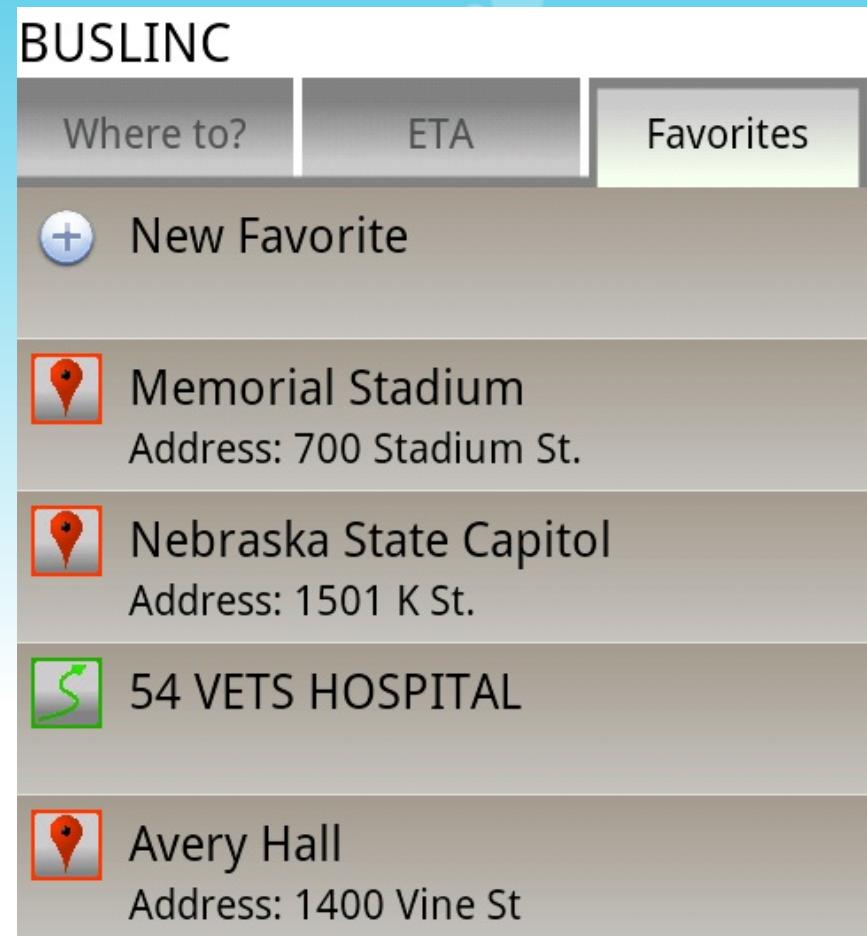
Implemented Features

Create and Edit Favorites (Destination and Routes)

Create New Destination

Name:

Avery Hall

Address:

1400 Vine St

Select from a map

Ok   Cancel

Create Route Favorite

Route

54 VETS HOSPITAL

Ok   Cancel

# Implemented Features

Walking route and directions
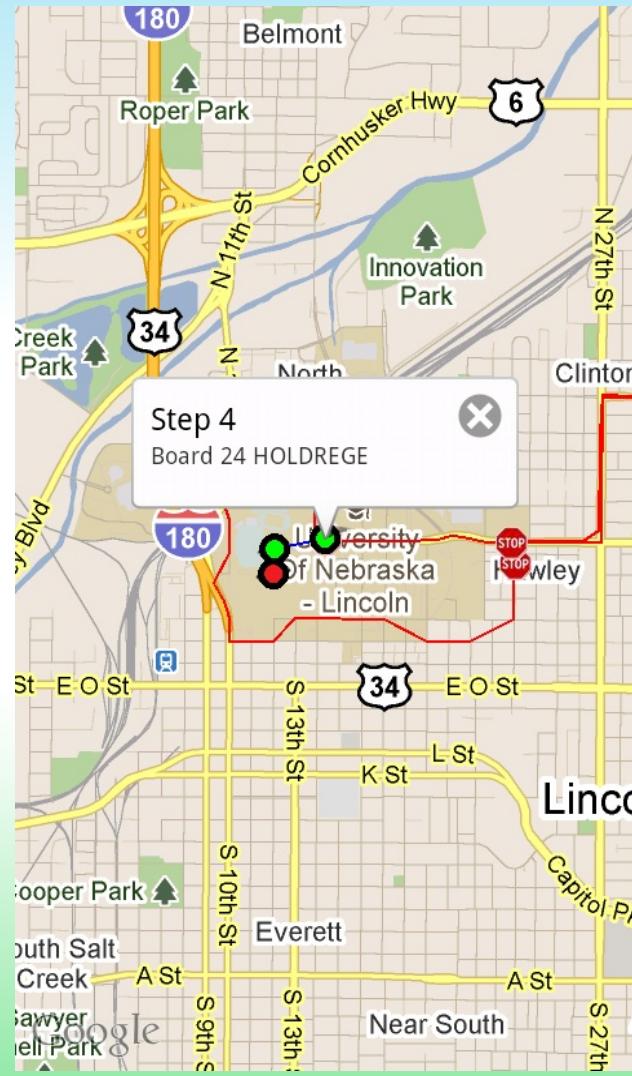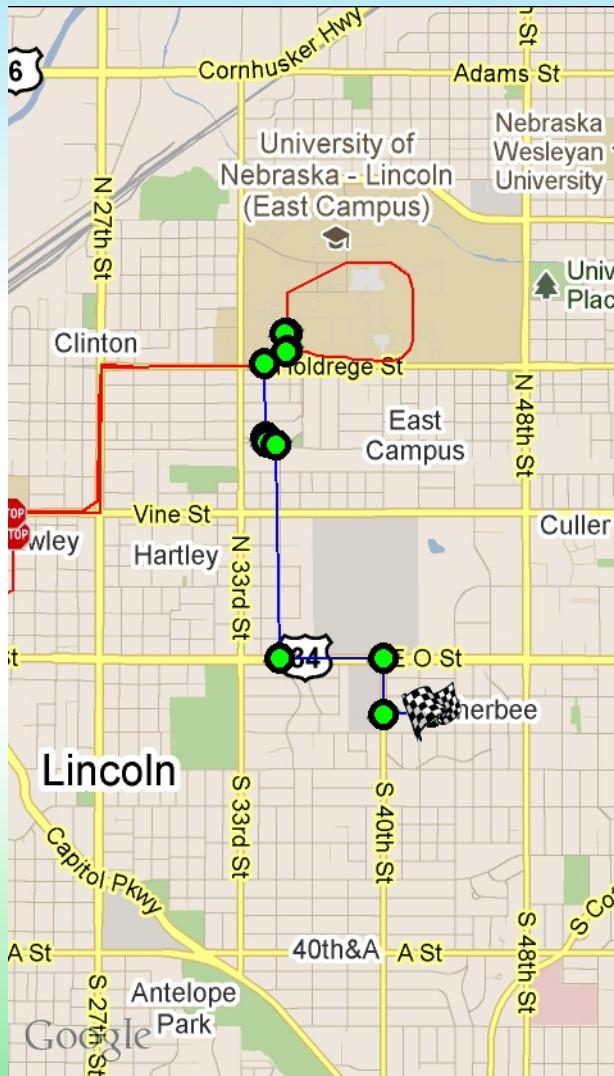
Unimplemented Features

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:
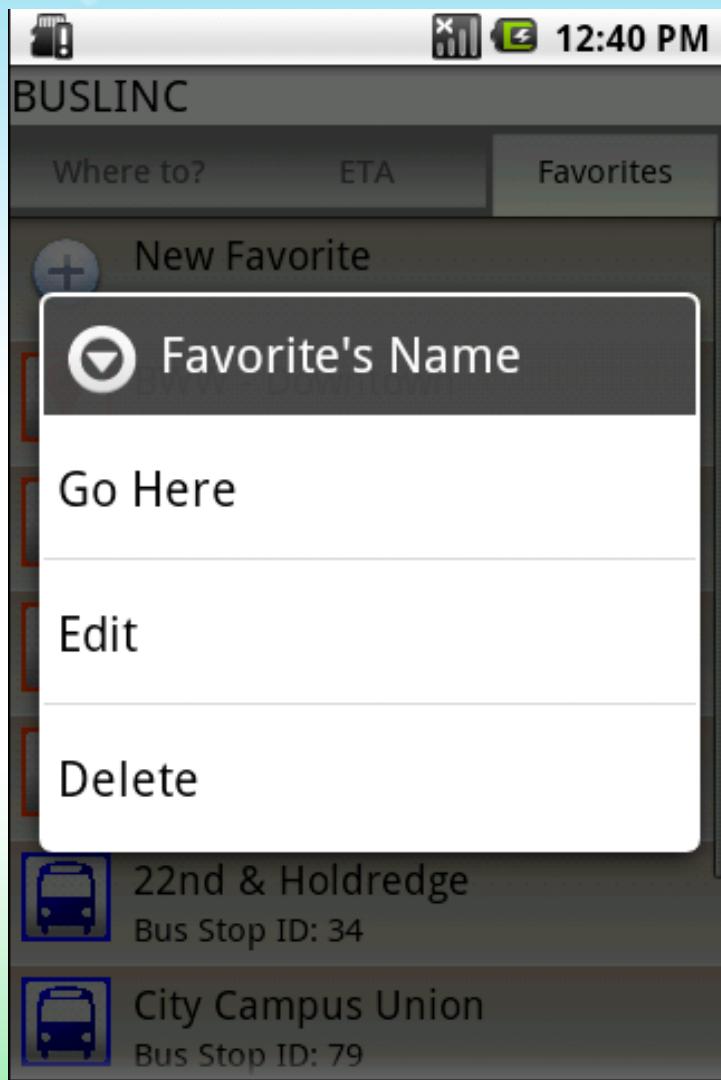
New:

Improvements

Old:
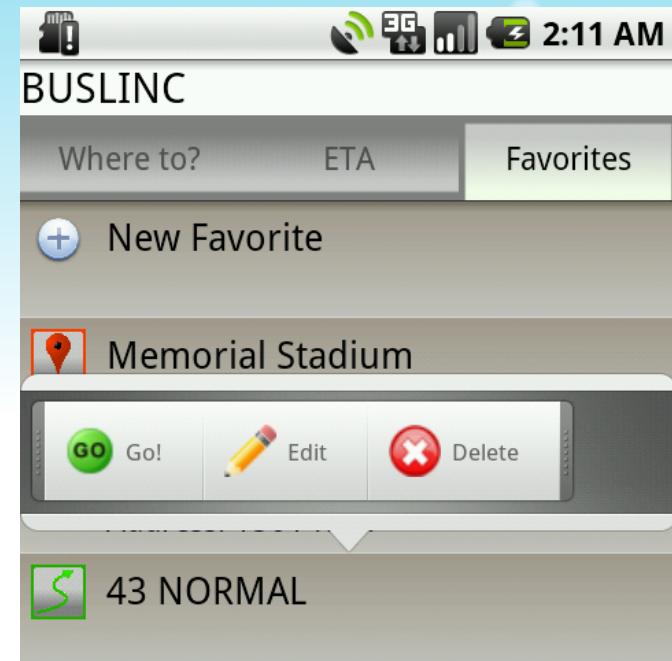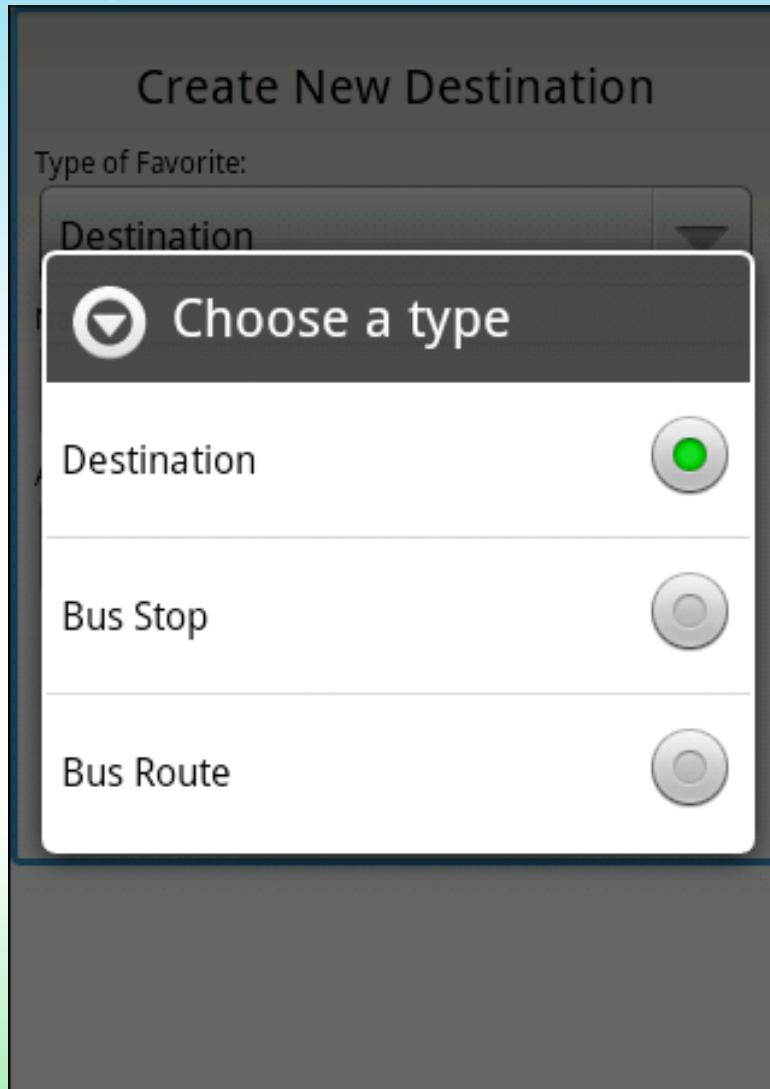
New:
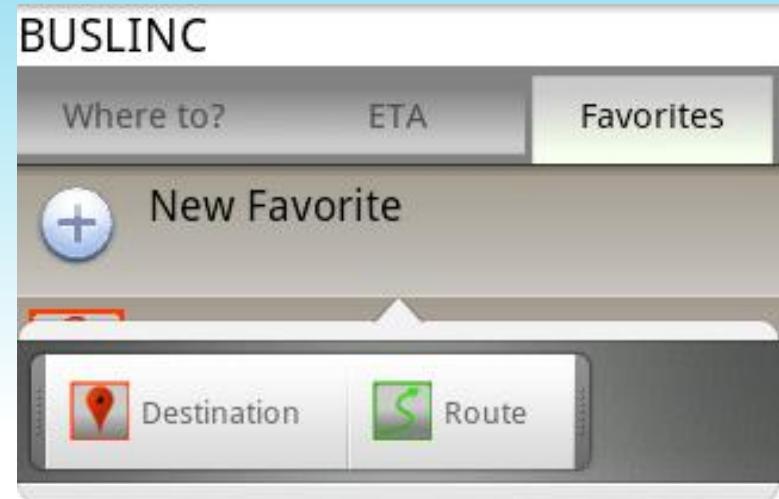
Improvements

Can handle no results
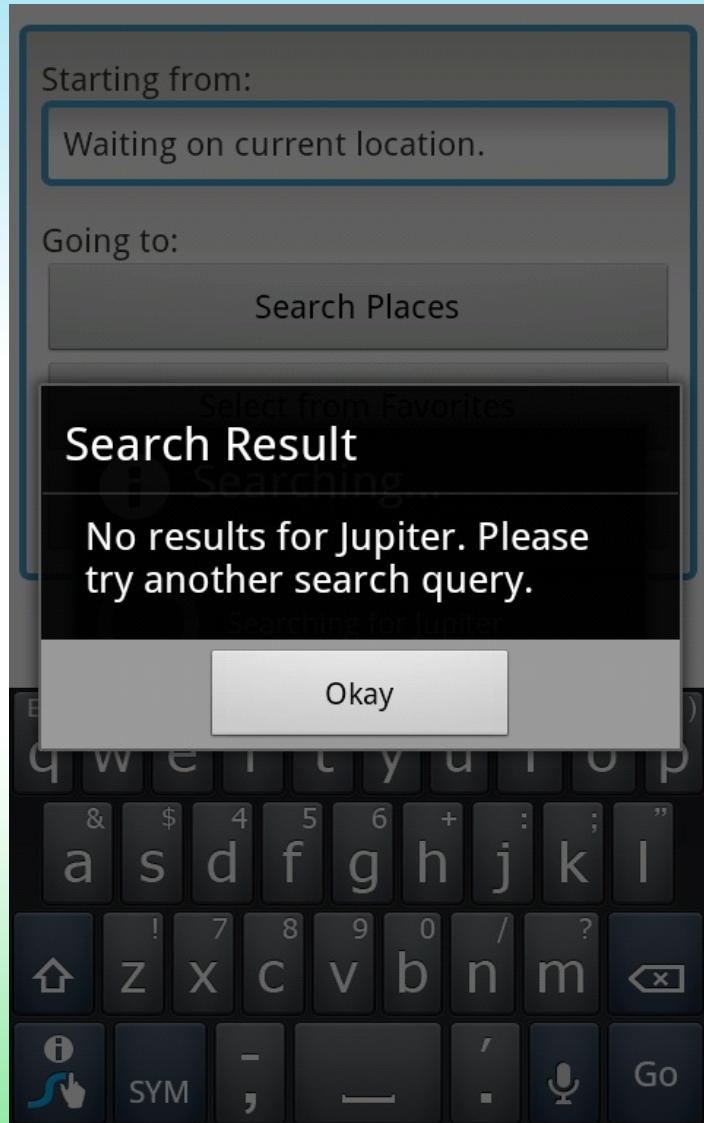
SPINNERS!
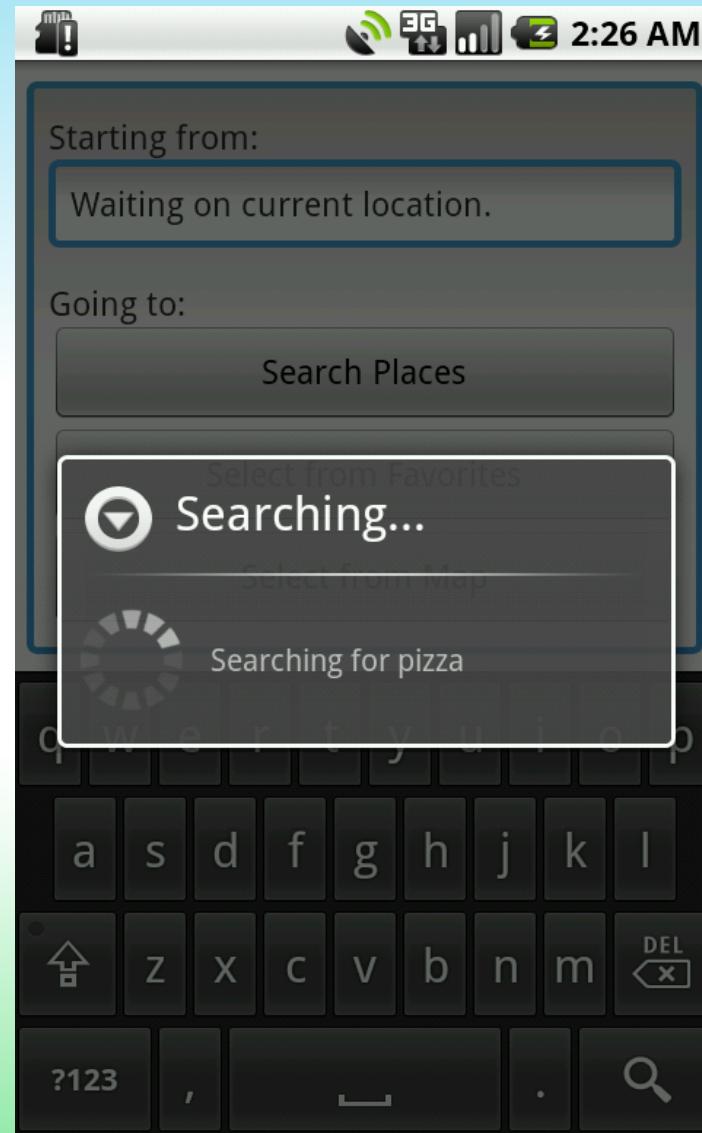
Demo

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

Questions?