CS 3420 – Assignment #8
Trip Planner

Introduction

This program requires you to use the Microsoft Map Point Web Service to create a simple trip planner. The trip planner allows the user to enter several cities and your program will take that list of cities and return a map showing the route, along with a text description of the step by step driving instructions.

Assignment

Write a trip planner according to the following specifications:

- Refer to the screen shots on the next page for any questions regarding the visual design. You may deviate from this design if it improves the program, not if it makes it easier!
- A list view on the left side where city names can be entered.
- A tab page on the right that displays a map and text of the constructed route. Each new route generates a new route tab, with this tab container a further two more tabs, one for the map and one for the driving directions.
- The from must be re-sizeable and the map scales with the form.
- Toolbar
  - Add: Adds a new city and immediately goes into edit mode.
  - Insert: Inserts before the selected city
  - Delete: Deletes the selected city
  - Reset: Clears the whole route
  - Build Route: Builds the route! :)
- Insert/Delete should only be enabled when an item is selected
- When the Build Route button is pressed, a worker thread must be created that does the chore of working with the MapPoint web service to generate the route, leaving the UI functional for the user to begin creating a new route.
- The directions should include a little heading like “--- to city ---” for each part of the trip.
- Your program must verify each city is found, if not, show a message and don't attempt to build the route.
- You must add one additional MapPoint feature of your own choosing. For example, the driving distance between each city and the total trip distance.
- You do not have to provide the ability to remove a tab, unless you just really want to.

NOTES:
- **Due: Thursday, April 19th**
- Include the heading required by your section at the top of your program
- Follow the style guidelines
- When complete submit your entire Visual Studio solution directory
- Submit through Eagle
--- To Page, AZ ---
1. DAY 1
2. Depart Logan on Local road(s) (North)
3. Turn RIGHT (East) onto US-89
4. Turn LEFT (South) onto US-89 [US-91]
5. Keep STRAIGHT onto I-15 Bus [I-84 Bus]
6. Take Ramp (LEFT) onto I-15 [I-84]
7. Reconstruction near Ogden (SB) (January 8, 2007 - September 30, 2008)
8. At exit 35, turn RIGHT onto Ramp
9. Turn LEFT (East) onto SR-20
10. Turn RIGHT (South) onto US-89
11. Turn LEFT (East) onto US-89 [E Center St]
12. Turn LEFT (East) onto US-89 [E 300 S]
13. Entering Arizona
14. Turn LEFT (East) onto US-89 Loop [N Lake Powell Blvd]
15. Keep STRAIGHT onto US-89 Loop [N 7th Ave]

--- To Montrose, CO ---
1. At Page, stay on US-89 Loop [N 7th Ave] (East)
2. Keep STRAIGHT onto US-89 Loop [S 7th Ave]
3. Turn LEFT (South) onto SR-98
4. Turn LEFT to stay on SR-98
5. Turn LEFT (East) onto US-160
6. Turn LEFT to stay on US-160