PROJECT3

Path Adviser based on Shortest Path Algorithms

Ⅰ. Purpose

1. To better understand the graph data structures learned in this course
2. Be more familiar with graph algorithms especially the shortest path algorithms

Ⅱ. Requirements

A. Implementation

1. You can choose one piece of map of any place you like.
2. The size of your chosen map must be appropriate: it should contain dozens of paths. (At least 20 nodes and no more than 30 nodes)
3. User enter the start and end place, then you print out the recommended path.
4. Your application should at least give the shortest walking route.(Bus route is bonus)
5. **ATTENTION**: You should show the used time of each query.

B. Document

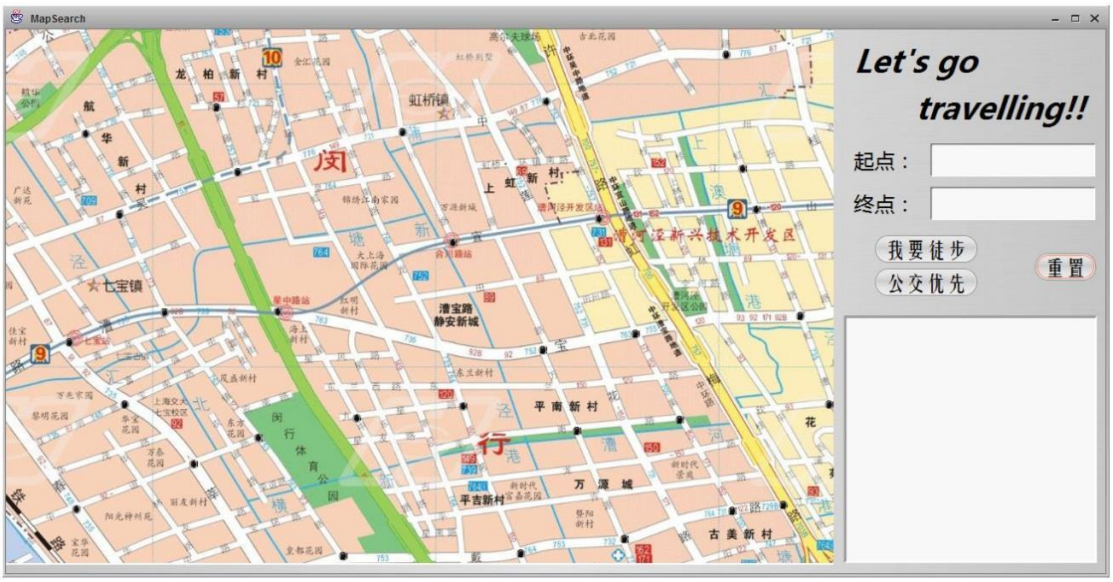
Document is very important, and you need to:

1. Tell how to use your application.
2. Show that which algorithm is used and explain why you choose that.
3. Analyze your implementation's performance with collected data.

Ⅲ. Score Points

Item		Cost
Application Implement (50%)	correct program logic	10%
	can choose specific location	10%
	can choose any location	10%
	map scale	10%
	single path type	10%
Coding Style		10%
Algorithm Efficiency		20%
Document		20%
Bonus	UI	5%
	composite path type	5%

Ⅳ. Simple Demo



User **click** the map twice to determine start and end location, and choose walk or **bus** in the right side. Then the recommended path will be **painted** on the map and be described in the text area of right side. (ATTENTION: The red bold part is bonus)

Ⅴ. Submissions

1. DEADLINE: 2021-01-10 23:59:59
2. You should submit all the source code, other related files and your documents including introduction and analysis to ftp