ABSTRACT

Bandung with its geographical conditions and its development as the capital city of West Java attracts many tourists as their destination. Many kinds of natural and artificial tourism resort are located all around Bandung. Many choices are provided such as cold weathered tourism resort, factory outlet, distribution store, museum, monument, park, and other interesting places. Bandung also provides culinary attractions and tourism supporting facilities such as hotel, mall, health care, transportation means, ATM, etc. They are built to give tourists comfort and easiness during their trip in Bandung. .

With so many interesting locations, there will be many people outside the city visit Bandung. Therefore, existence of guide will be important to make people outside the city easier to understand everything during their trip in Bandung

The objective of this research is to build a geographic information system of tourism which can determine shortest path from one place to another as a guide for the tourists to find the route to their destination while exploring Bandung. Web-based system is designed so that it can be accessed by users (tourists) from various places both inside and outside Bandung, so they can plan their tour while they are still in the house. Algorithm A * (A Star) is used to determine the shortest path. This algorithm can determine the shortest path with minimum weight (distance) by counting the heuristic value, so that the result is an optimum route.

The result from this research is an integrated tourism website which provides a profile of the location of tourism (culinary) and completed with geographic information through the display of interactive map and being able to determine the shortest path from one location to another. With this geographic information system, it is expected that it can provide complete information and consideration for tourists in doing their trip. It also can be a promotion tool for the government especially tourism ministry to introduce Bandung as a tourism city nationally and internationally.

Keywords: Geographical Information System, Routes, Tourism