

## **Abstract**

Bandung is one of big city with high-rate of development of city in Indonesia. It just takes 2 hours from Jakarta makes this city often visited by people around Jakarta especially in the weekend. This condition causes the need of a tool that can help people to search the location they want to go and help them by inform the shortest path they can pass to get the place they want to go. Tool which have function to view the map of a city include the direction of its street which is implemented in a computer program is called Geographic Information System (GIS).

In this final project, a Geographic Information System was developed to find the shortest path which can be passed from the start of location to the destination place which has been mentioned before in this application. The starting point and the destination place are selected by user. The parameter which is used to find the shortest path in this application is the distance from the start place to the destination place. This geographic information system has been implemented as a web application. The advantage of a web application is its ability to be used by many users in the same time just by installing a web browser in their computer. The development of this geographic information system used some tools which were integrated together. To create and design the spatial data and attribute data using Mapinfo Professional 8.0 software. To design the interface and to develop the program by implementing the shortest path algorithm is using Visual Studio .Net 2003 include the MapXtreme 2004 software which has been installed.

Final result of this application is an application which display the map of Bandung city in digital format and can be accessed by using web application. The main function of this GIS application is to find the shortest path between two nodes which input by user. The shortest path will be displayed as a visualisation in the thematic map.

**Keywords : geographic information system, shortest path, MapInfo.**