CHAPTER I INTRODUCTION

1.1 Background

In this modern era, a problem traveling salesman problem is often used as an ingredient for solving the problem. Search the shortest distance of a few points are needed in today's remember the importance of time and cost efficiency in transport in the modern era, because with use not efficiency in this modern era will make would be detrimental to many parties, namely time, cost and human resources in the modern era.

Because the reasons above, a new application need to be developed. This application aims to map a user in any city that must be passed first in the desire to achieve the most optimal distance. This application is made with the help of google API (which helps to map meta and distance of the town) and assisted by complete enumeration algorithm that makes comparisons distance of each city and find the optimal point.

1.2 Scope

This project is created with PHP programming, using various array good array of one-dimensional or multidimensional as data structure. Method Enumeration is used as a main algorithm assisted with the Google maps API to map the location and get the distance.

Problem Limitation on this project are:

- 1. Selected city from the map there should be the name of the road (do not named) because it would interfere with the process of finding the distance.
- 2. The number of cities that are processed can not be too much because the results are not optimal.

- 3. Because using the internet application, internet connection should be smooth, if the Internet connection is slow then the program does not work optimally.
- 4. The name of the town should be clickable map, can not type.

1.3 Objective

This application was made to get the shortest distance of a few selected cities. First, how many enter the desired city. Then, select a city from the map that is already available. Then, get the distance from each of these cities. Finally, we get the city which must be passed in order to get the shortest distance (optimal).