

# CHAPTER IV

## ANALYSIS AND DESIGN

### 4.1 Analysis

#### 4.1.1 Use Case Diagram

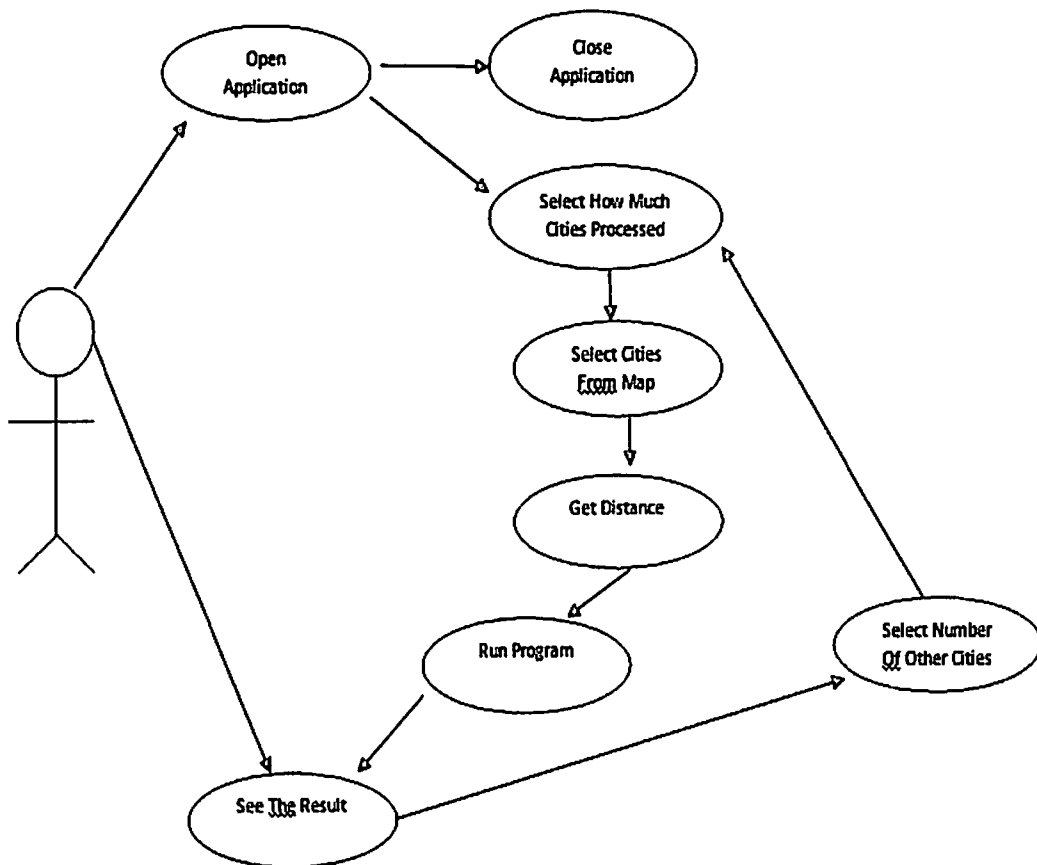


Figure 4.1 Use Case Diagram

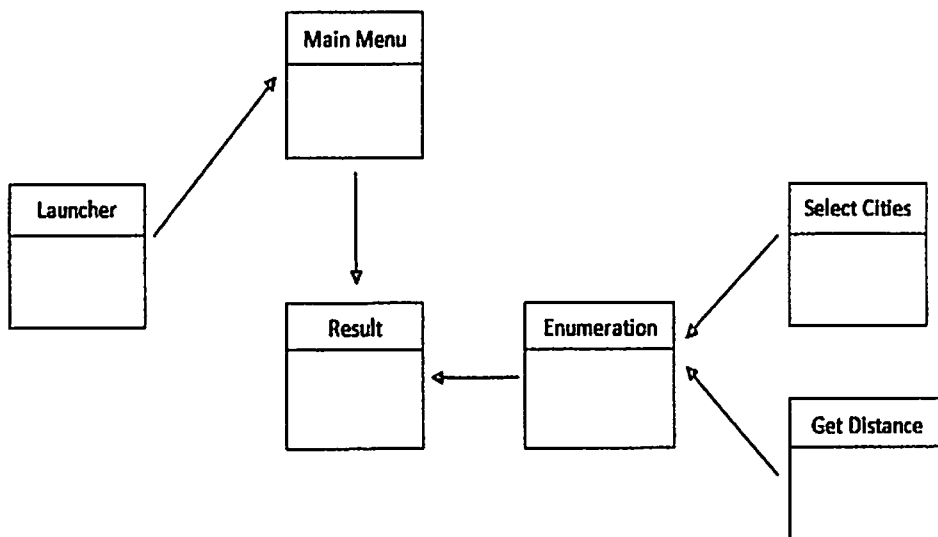
The user can open and close applications.

When you open the application, the user will first choose how many cities to be processed, then the user will select a city from the map that is available, then the program will get the distance between cities. After that run the calculation program. Users can see the results and can perform initial process again.

## 4.2 Design

### 4.2.1 Class Diagram

When the application is run, the user will fill in how many cities to be processed. Then get in on the process of selecting the town on map (map). Then get the distance between cities. Finally, the calculations are performed .



*Figure 4.2 Full Class Diagram*

in the class diagram, associated with the launcher menu, then from the menu are the final results are directly related to the process of enumerating the data obtained from the selected city and the distance between cities.