## CHAPTER IV ANALYSIS AND DESIGN

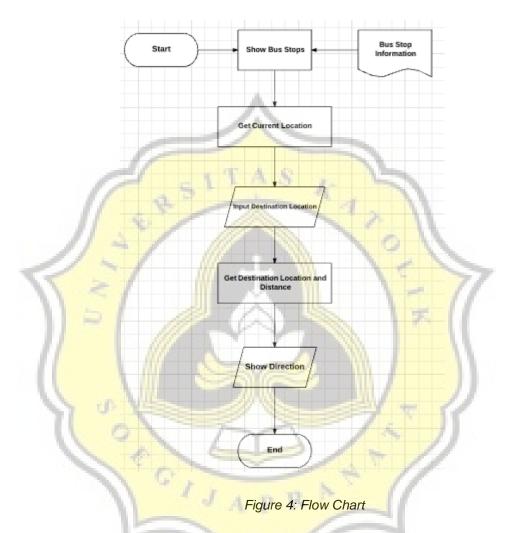
## 4.1. Analysis

On this project using Google Maps as map interface, and using the Google Maps API Direction as the direction helper of location from current to destination that connected by the closest BRT bus stop to the user and destination location. The destination location can be obtained by entering keywords or location name into the textbox service that provided by Google Maps API on the map interface in this project. Markers of BRT bus stop on map obtained from source that listed in the internet and then added manually into the form of a text file (.txt), contains the name of the BRT bus stop location, the value of the latitude, value of longitude, and the number of corridors that are separated by a comma (","). When the data inserted into the text file, it will be called by programs in the form of arrays so that the data can be displayed consecutively.

Besides being able to show the direction of travel route of user from one stop to another stop, the user can find out the distance between the location of origin of the user with the stop closest to the user and the distance of the destination location with the stop closest to the destination.

## 4.2 Design

## 4.2.1. Flow Chart



When the application run for the first time, then data of the bus that had been stored in a text file (.txt) will be directly displayed on the main display. At the same time, the current location function will be directly displayed too on it. To get the direction from current location to the destination location, the user need to input the name of the destination location so that the direction will directly obtained after inputing the name of destination.