CHAPTER 1
INTRODUCTION

1.1 Background

In every project needs a plan to get the maximum result such as in a minimum period of time and also in a minimum cost. Something can be called as a project if it has a lot of activities that have restriction of time (start and finish), resources, and money. And a project must be organized so that reach a maximum result. A lot of things that can be done to achieve that result. Somethings that should be known are activities in the project and also time that required to finish each activity. One thing that can be done is determine which activities that affect the result by time, using Critical Path Method (CPM).

Critical Path Method is a project that depicted in the form of a network. Network diagram will make it easier to know which activities that take effect in the project on user interface. Besides network diagram, there is gantt chart that will help to organize project and monitor the project progress. Those two will help in the project planning and to manage the project so the project can running smoothly and not be delayed. Critical path is a activity that important and urgent, can’t be delayed because it will affecting the overall on project completion. Delayed activity on critical path will delay completion this overall project path. Otherwise, overall project completion can be accelerated with accelerate the completion activities on the critical path.

A lot of media can be used to organized the project by using critical path method. Such as by manually take a note using computer, notebook, laptop, and also smartphone. But the most practical way by using smartphone, because it can be used anywhere and anytime. Smartphone’s operating system that the most commonly used in Indonesia is Android. Because of that, this project is to create a
program that can find the critical path of a project and show the critical path in network diagram and gantt chart.

1.2 Scope

The scopes of this project are:

1. Input time from user have the same unit.
2. Project only have one initial event (start) and one terminal event (finish).
3. Program only count the longest time which become the critical path.
4. Program will show a final result in network diagram and gantt chart.

1.3 Objective

The objectives of this project are:

1. To search and determine the critical path of a project.
2. To count the completion time of a project.
3. Show the critical path in network diagram and gantt chart.