## **ABSTRACT**

Project Management is an important thing to develop a project. With the existence of good management project, project can be executed better and on schedule.

Critical Path Method (CPM) is a management tool which is widely used in the construction project. A project network on CPM scheduling is composed of various activities interrelated in a sequential relationship. If delay occurs on one activity, it will eventually cause the project overall duration to delay.

To anticipate the project delays, can be use "what if" analysis by accelarating the activities on CPM scheduling. The acceleration actions are treated in accordance with additional working hours and man-power in the succeeding activities.

In this final project, system for project management is built. This system is able to do the project schedulling and give recommendation for increasing manpower and working hours to anticipate the project delays.

**Keywords**: Critical Path Method, project scheduling, what-if analysis, project acceleration